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# FIRST ANNUAL REPORT

**APPUI À LA VALORISATION DU POTENTIEL AGRICOLE DU NORD, À LA  
SÉCURITÉ ÉCONOMIQUE ET ENVIRONNEMENTALE**

**(AVANSE)**

**OCTOBER 2013**

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(AVANSE)

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# FOREWORD

This first Annual Report is exceptional in that it covers only a six-month period from the April 4<sup>th</sup> inception of AVANSE until the end of Fiscal Year 2013 on September 30, 2013. Since this was the start-up period during which basic project infrastructure was installed, and since this period did not cover a major planting season, so far there are no major implementation activities to report. Concrete implementation activities in the core IRs will begin in earnest in the fall of 2013, with the arrival of crop planting windows for the five major focus crops in the period of October 2013 to January 2014. This calendar period, which marks the advent of the rainy season, is also a critical period for the planting of the various types of crops that are important to IR 2's efforts to promote non-erosive cropping systems on hillsides. IR 3 and IR 4 activities in this six-month period consisted of major efforts to survey potential partners, including agro-enterprises, CBOs, NGOs, and agricultural support institutions—including the Ministry of Agriculture (MARNDR). These efforts are reflected in the Quarterly Activities Report that is included in the Annual Report. Following the Quarterly Activities Report, we present a brief Annual Progress Report, which reviews progress achieved to date against the schedule of activities as depicted in the second draft six-month workplan that was submitted to USAID in June.

Because the period covered in this report did not yet include any core implementation activities, the last section of this report (the Annual Results Report) consists mainly of a presentation of the overall results matrix with 38 separate indicators, rather than a report on results obtained to date. This matrix presents each indicator with all baseline and target information available at the publication date of this report. Many of the baseline and target values are listed in this as To Be Determined, since the baseline surveys have not been conducted and because the AVANSE technical team still needs to finalize certain targets during a staff retreat planned for November 2013. Following this retreat, the AVANSE team will submit the final proposed matrix with annual targets for all indicators to USAID for approval.

The Annual Report ends with three annexes that provide important details on activities referenced in the Quarterly Activities Report.

# ABBREVIATIONS

AVANSE	U.S.-Haiti Feed the Future Partnership: Northern Corridor project “Appui à la Valorisation du Potentiel Agricole du Nord, à la Sécurité Economique et environnementale”
BAC	Bureaux Agricoles Communaux
CASEC	Conseil d’Administration de la Section Communale
CBO	Community-based organization
CNSA	Conseil National pour la Sécurité Alimentaire
DDA	Directions Départementales Agricoles
DEED	Développement Économique pour un Environnement Durable Project
DGI	Directorate General of Taxes
DR	Dominican Republic
FFS	farmer field school
FOG	fixed obligation grant
FTF	Feed the Future Initiative
Gds	gourdes
GIS	geographic information system
ha	hectare
HIFIVE	Haiti Integrated Finance for Value Chains and Enterprises program
ICT	information and communications technology
IDB	Inter-American Development Bank
INARA	National Institute for the Application of Agrarian Reform
IP	implementing partner
IR	Intermediate Result
LTTA	long-term technical assistance
MARNDR	Ministry of Agriculture, Natural Resources, and Rural Development
M&E	monitoring and evaluation
ME	micro-enterprise

MIS	market information system
NGO	nongovernmental organization
NRM	natural resource management
OCA	organizational capacity assessment
PIF	Production Intensive par Fragment
PMP	performance monitoring plan
PO	producer organization
PPP	public-private partnership
RESEPAG	Strengthening of Agricultural Public Services Project
RFP/RFA	request for proposals/request for applications
SME	small and medium-sized enterprise
SRI	System of Rice Intensification
STTA	short-term technical assistance
SWMB	sub-watershed management body
SWMP	sub-watershed management plan
TAMIS	Technical and Administrative Management Information System
USAID	U.S. Agency for International Development
VC	Value chain
WUA	water user association



# QUARTERLY ACTIVITIES REPORT

## IR 1: AGRICULTURAL PRODUCTIVITY INCREASED

In September, the Rice and Water-User Association Specialists (Jean-Buddy Lucien and Luc Saintvil) joined the IR1 staff. These additions finally brought IR 1 to its full technical LTТА staffing level. The members of the LTТА IR 1 team are shown to the right.

During the last quarter of the fiscal year, IR 1 staff focused mainly on finalizing crop production models, selecting field intervention areas and identifying first-round Farmer Field Schools (FFSs), and preparing for procurement of the critical planting material for use in first-round FFSs. Activities are described below as listed in the draft six-month workplan submitted to USAID.

### IR 1 LTТА staff as of September 30:

Senior Agricultural Production Specialist: **Philippe Mathieu**

Maize & Beans Specialist: **Mathias Fils-Aimé**

Cacao Specialist: **Raoul Dominique**

Banana Specialist: **Julène Moïse**

Rice Specialist: **Jean-Buddy Lucien**

Water-User Association Specialist: **Luc Saintvil**

## SUB-RESULT 1.1: KNOWLEDGE AND AVAILABILITY OF IMPROVED PRODUCTION TECHNOLOGIES AND SYSTEMS INCREASED

### Activity 1: Assemble and adapt FFS training materials for 5 target crops.

Implementation of this activity continued for all five crops during the quarter. The cacao model was finalized during the quarter according to the workplan schedule. At the end of the reporting period, however, work continues on the finalization of the models and training materials for the other four focus crops. This delay was due to the late mobilization of the rice and banana LTТА crop specialists, and also the delayed approvals of the various short-term crop STTAs whose input is required to finalize the technical crop-production models. These delays should not impact the overall implementation schedule for IR1 FFSs, however, as the models for the remaining four crops will be finalized before their respective planting seasons in the next fiscal year.

During the quarter, IR 1 staff and consultants achieved the following outputs under this activity:

- Finalized cacao production model;
- Completed draft production models for beans and bananas;
- Started STTAs for rice and developed the scope of work for a corn STTA (consultant still awaiting USAID approval at end of quarter);
- Inventoried WINNER materials and approaches for maize; and

- Established the base elements of a document library for production materials related to the five focus crops.

### **Activity 2: Delimit Target Zones and Identify Crop Implementation Sites for FFSs.**

IR 1 staff collaborated with IR 2 staff and consultants to complete extensive field investigations, including focus-group meetings with farmers and local CBOs in areas identified by AVANSE GIS technicians with terrain favorable to the IR 1 crop packages. At the term of the reporting period, these IR 1 and IR 2 teams have delimited the target zones and crop implementation sites to serve as the basis of activities over the five years of the project. Table 1 below gives a complete picture of the different Target Zones and IR 1 Crop Implementation sites located within each. The smallest area described in Table 1, the Crop Implementation Sites, have been identified through a combination of quantitative and qualitative analyses: a GIS analysis identified areas offering the right combination of economic and agro-hydrological characteristics for each of the IR 1 focus crops, and IR 1 staff and consultants conducted focus group meetings with Producer Organizations, CBOs and local government authorities in the course of their qualitative evaluations. The Crop Implementation Sites represent areas in which FFSs will be located throughout the life of the project. Target Zones, which we have defined as the larger sub-watersheds in which each Crop Implementation Zone is located, also include larger areas requiring protection with agro-forestry interventions under IR 2. In the cases of bananas and maize/beans, there is little practical difference between the Target Zones and the Crop Implementation Sites, since virtually all the arable land in all the relevant Target Zones offers good potential for these crops. A full description of the methodology used to identify these sites, along with maps of the target zones and IR 1 Crop Implementation Sites for each crop, are presented in Annex A.

**TABLE 1: IR1 TARGET ZONES AND CROP IMPLEMENTATION SITES**

Target Zone	Watershed(s)	Sub-Watersheds	Focus Crop(s)	No. of Ha in Crop Implementation Sites
Desroches-Limbé	Limbé	La Hatte, Bellevue, Diotin, Lorman, Blain	Banana	2,989
La Suisse-BordMer	Haut-du-Cap, Grande-Rivière du Nord	Larry, Dubre, Pont Parois, Tabary	Banana, Cacao	11,500
Limonade-BoisLance	Grande Rivière, Trou-du-Nord	Lescamotier, Fourier, Canot, Devarenne, Savanne au Camp, Toreste, Fleury, En Bas Saline	Bean/Maize, Cacao	7,873
Bayaha-Maribaroux	Marion, Jassa	Malfety, Colette, Dumas, Lamatry, Bossus	Rice	2,800
Camp Coq-Marmelade	Limbé	Chaino, Morne Panache, Camp Coq, Moreau	Cacao	1,115

Sainte Suzanne-Gens de Nantes	Grande Rivière, Trou-du-Nord, Marion, Jassa	Malfety, Colette, Dumas, Lamatry, Bossus	Cacao	5,262
Grison Garde-Robillard	Haut-du-Cap	Duplesis, Brisson, Robillard	Bean/Maize, Cacao, Rice	2,354
<b>TOTAL</b>				<b>33,893</b>

At the close of the reporting period, AVANSE staff were finalizing the presentation of the study on Target Zones and Crop Implementation Sites for presentation to MARNDR and USAID. It should be noted, however, that AVANSE staff have already presented the proposed Crop Implementation Sites in numerous technical meetings with the MARNDR/DDA staff in both the Départements du Nord and du Nord-Est, so the basis of effective ground-level collaboration has already been established. Formal presentation of the IR 1 and IR 2 project sites will occur early in the next reporting period.

**Activity 3: Procure and multiply improved foundation planting materials; initiate first-round nursery production and multiplication.**

During the reporting period, the IR 1 staff made the necessary contacts to source and launch procurements for the planting material listed below in Table 2. Actual billing of the expenses for all these procurements is contingent on USAID issuing the required restricted goods waiver for all the items in Table 2 and source/origin waivers for the material coming from outside of Haiti and the US. This waiver was still pending at the close of the reporting period, but DAI has made the decision to authorize the procurement of much of the planting material in Table 2 at its own risk, since these are time-sensitive procurements and must be available to FFSs for the requisite seasonal planting windows in order for the project to keep on track to attaining its expected results. Only the procurement of banana material was on hold in anticipation of the receipt of waiver approvals from USAID, as there is more flexibility in the planting season for bananas. To ensure that the material ordered in Haiti meets the desired quality specifications, IR 1 staff have established clear quality parameters for evaluating the procurements, and they have also set up a technical review committee to test germination all locally-sourced planting material received with germination.

**TABLE 2: PLANNED IR 1 PLANTING MATERIAL PROCUREMENT FOR FIRST-ROUND FARMER FIELD SCHOOLS**

Commodity	Variety	Scientific name	Source	Unit name	Total quantity required	Unit price (USD)	Total cost (USD) (est.)
<b>Material going to IR 1 Crop Implementation Sites</b>							
Beans	ICTA Ligerio	<i>Phaseolus vulgaris</i>	Guatemala	kg	6,250	2.50	15,625
Beans	Arroya Loro Negro	<i>Phaseolus vulgaris</i>	Dominican Republic	kg	6,000	2.40	14,400
Lima beans	Bese Ba	<i>Phaseolus lunatus</i>	Haiti	kg	1,000	2.70	2,700

Lima beans	Ford Hood	<i>Phaseolus lunatus</i>	USA	kg	1,000	8.36	8,360
Banana	FHIA-20 and -21		Dominican Republic	each	360,000	2.00	720,000
Maize	Chicken corn	<i>Zea mays</i>	Haiti	kg	2,500	1.30	3,250
Maize	Comayagua	<i>Zea mays</i>	Honduras	kg	1,000	5.75	5,750
Maize	Hugo Haiti	<i>Zea mays</i>	Haiti	kg	2,000	1.30	2,600
Maize	Pioneer 3041	<i>Zea mays</i>	Dominican Republic	kg	1,000	5.75	5,750
Rice	TCS10	<i>Oryza sativa</i>	Haiti	kg	2,500	0.80	2,000
Rice	PROSEQUISA	<i>Oryza sativa</i>	Haiti	kg	2,500	0.70	1,750
Cocoa	Cocoa seedlings		Haiti	each	15,000	1.02	15,300
Cocoa	Budsticks – grafting training		Haiti	each	10,000	0.14	1,400
Cocoa	Budsticks		Dominican Republic	each	3,500	5.00	17,500
<b>Total:</b>							<b>816,385</b>

Of all the material listed in Table 2, only the cacao seedlings have actually been planted in nurseries in preparation for the arrival of budwood from Haitian and Dominican sources to produce the first generation of grafted seedlings for use in IR 1 cacao budwood gardens. Planting of all other material is pending arrival of the material and the beginning of the planting season.

#### **Activity 4: Deliver Training Modules in FFSs.**

The first field training activities under AVANSE began in July and August with trainings of the farmer field technicians and grafters who will be the lead trainers/service providers in the cacao FFSs. Two sets of trainings were held. The first of these was on cacao production and care for 54 field technicians in two separate, week-long sessions. The second training, with an international grafting STTA, was delivered to 33 field grafters and MARNDR extension staff, who learned how to do side grafting of mature trees as well as more traditional seedling grafts. These personnel will have a key role in the actual start of cacao FFS trainings in the next reporting period. For other crops, field trainings will begin in the next reporting period, when the crop models are finalized and the FFS sites selected.

#### **Activity 5: Production starts in first-round FFSs.**

The first step in launching production activities in FFSs is the finalization of FFS siting and the enrollment of farmer members. This was completed in the prior period for cacao. In the final quarter of the fiscal year, the process was completed for bananas, beans. At the close of the period, IR 1 had identified approximately 2,400 members for cacao, beans and banana FFSs. This represents 60% of the



planned 4,000 members for the first year. This process of identifying farmer members will continue in the next quarter for rice and maize.

Actual field production activities started in July in the cacao value chain, with the establishment of 51 sites for clonal budwood gardens that will be planted in the fall with grafted seedlings using high-yielding budwood from the Dominican Republic and from an inventory of 597 Haitian “super trees” identified by IR1 staff and by the DEED project. These sites and clonal garden operators have all been identified with surveys to determine actual planting sites for the grafted seedlings, which will be done in October when rainfall is judged to have been sufficient.

#### **Activity 6: Leverage Expertise in Production Available from US Universities.**

Discussions with Auburn University and the Global Knowledge Initiative (GKI) held during the quarter led to a revision of the planned calendar for this activity. The original plan of holding a workshop to explore partnerships between US and local universities has been postponed until February/March 2014, replaced by an exploratory mission from Auburn University and the GKI prior to the end of November. This exploratory mission will be used to solicit input from both northern and national universities with agronomics faculties in the design of the later workshop, and also to permit the exploration of possible areas of collaboration between Auburn University and AVANSE. Areas now under discussion that will be assessed in November include: establishing a soil testing laboratory in the North; developing a business plan for a for-profit tissue culture plant propagation facility; and establishing research protocols with Universities to track production performance in selected FFS crop parcels.

### **SUB-RESULT 1.2: STRENGTHENED EXTENSION OF AGRICULTURE TECHNOLOGIES.**

#### **Activity 1: Conduct analysis of impact of gender on crop production system.**

During the month of July, Making Cents’ Sam Sternin completed an STTA to help IR 1 staff integrate gender into their production activities for each of the five focus crops. In addition, a workshop to review findings and discuss programmatic implications was held before Mr. Sternin’s departure from Haiti. The main result of this work has been the integration of specific targets for women’s participation in FFSs and Water-User Association activities supported by the project in the draft SOW presented to USAID in September. The findings regarding women’s participation in each of the five target crop value chains are presented in Annex B.

### **SUB-RESULT 1.3: ACCESS TO INPUTS INCREASED**

#### **Activity 1: Develop test voucher program for planting materials in Crop Implementation Sites; Activity 2: Develop test voucher program for fertilizers/pesticides in Crop Implementation Sites.**

A design STTA from international agricultural input voucher expert Joël Le Turioner was underway at the close of the reporting period. Following this mission, AVANSE will initiate a test voucher program in the next reporting period focusing on cacao, banana and rice crops. Due to seasonal windows, it will not be feasible to include maize and beans in this first-round test of vouchers, so FFS members for these crops will need to receive direct subsidies for certain elements of the crop packages. This initial pilot test will lead to a second phase roll-out of a larger program for the fall planting season in 2014 covering all five crops and involving Implementing Partners for IR 1 extension packages.

During the initial voucher design mission, AVANSE has taken care to coordinate its planning with the MARNDR and with the two IDB/WB projects (PTTA and PMDN), which are also promoting the use of vouchers as opposed to direct subsidies for agricultural inputs. Discussions between AVANSE and these other Ministerial and donor actors have revealed some differences in approaches (the most important of which is the fact that the MARNDR/IDB/WB projects are offering inputs with 100% subsidies with no mechanisms for incorporating farmer cash contributions) that will need to be resolved as AVANSE proceeds with its implementation plans. To ensure that this important coordination takes place, AVANSE will continue to participate in the monthly, MARNDR-led Table de Concertation on agricultural input vouchers that has been formed over the past three months.

#### **SUB-RESULT 1.4: MANAGEMENT CAPACITY OF WATER-USER ASSOCIATIONS INCREASED**

##### **Activity 1: Assessment of WUA capacity in Crop Implementation Sites.**

Since the Water-User Association expert was only mobilized at the end of September, the launching of this activity is significantly behind schedule. This assessment was to have been completed by September, but the WUA Specialist has only begun to work on the necessary field-level scopes of work for data collectors and consultants. This assessment will be accelerated as much as possible in the next period.

##### **Activity 2: Design of WUA management-strengthening program.**

Work has not begun on this activity as planned due to the delays in Activity 1 above.

#### **SUB-RESULT 1.5: PROPERTY SECURITY STRENGTHENED**

##### **Activity 1: Conduct initial diagnostic study for dry-lands development grants.**

The IR 1 Team Leader met with the new head of INARA and the Director of the *Comité Interministériel d'Aménagement du Territoire* (CIAT) to assess their approach to land-tenure issues concerning the dry-lands in the North-East Department that are the focus of this activity. Work is continuing to develop the scope of work for the initial diagnostic study.

##### **Activity 2: Initiate pilot irrigation activity to test technical feasibility.**

IR 1 staff held several site visits to assess the accomplishments of the IFAD-funded PPI project that has experimented with various small-scale irrigation technologies. Actual implementation of this activity will take place in the next reporting period.

## IR2: WATERSHED STABILITY IMPROVED

There were two additions to the IR 2 LTТА team during the reporting period. The first of these was the July hiring of the team's GIS assistant Dawine Pierre. Then in September, Hillside Agro-Pastoral Specialist Frantz Cothière joined the IR 2 team. Only three positions still remained vacant as of the end of the reporting period.

During the quarter, the IR 2 team contributed to important work in conjunction with IR 1 staff to finish the delimitation of the project intervention zones and to lay the foundations for upcoming investments to strengthen sub-watershed management bodies and to promote improved agro-forestry practices on hillsides.

The regular planning of the IR 2 team was interrupted in the quarter by the need to fast-track a hillside stabilization activity for the protection of ravines above the Grison Garde watershed, following the project launching event and visit to the site by the President of the Republic. IR 2 staff spent a considerable amount of input organizing fast-tracked, urgent, cash-for-work interventions to stabilize five ravines in the zone. Since this is considered to be an intervention that is beyond the farmer plot level, it is treated in the Infrastructure section of this report under Hillside Stabilization.

### IR 2 LTТА staff as of September 30:

Watershed Management Team Leader: **Jean-Claude Pierre Louis**

Watershed Management Specialist: **Yves Gossin**

GIS Specialist: Vacant

GIS Assistant: **Dawine Pierre**

Hillside Agro-Pastoral Specialist: **Frantz Cothière**

Watershed Management Leader – East: Vacant

Watershed Management Leader – West: Vacant

## SUB-RESULT 2.1: WATERSHED GOVERNANCE BODIES ESTABLISHED AT THE SUB-WATERSHED LEVEL

### Activity 1: Select Target Sub-Watersheds.

This activity was completed during the quarter as scheduled. The results of the IR 2 team's GIS inventory of critical hillside zones requiring investments in agro-forestry systems are listed below in Table 4 under Sub-Result 2.3 and appear in the maps in Annex A. Taking this list of 19 total Sub-Watersheds, the IR2 team narrowed its focus to select 12 Sub-Watersheds for detailed capacity-building interventions by eliminating all Sub-Watersheds in the Limbé watershed (SWMBs already exist here thanks to DEED project interventions) and in the Bayaha-Maribaroux where the number of hectares requiring agro-forestry interventions is quite small. The selected Sub-Watersheds that will receive assistance with SWMB formation are shown below on Table 3.

**TABLE 3: SUB-WATERSHEDS SELECTED FOR SWMB ASSISTANCE**

Target Zone	Watershed(s)	Sub-Watersheds Targeted for SWMB Formation
La Suisse – Bord de Mer	Haut-du-Cap, Grande	Larry

	Rivière du Nord	
Limonade – Bois de Lance	Grande Rivière, Trou-du-Nord	Savanne au Camp
Sainte Suzanne - Gens de Nantes	Grande Rivière, Trou-du-Nord, Marion, Jassa	Morne Ouanche, Jolitrou, Bois de Lance, Maquillon, Acul des Pins, Francisque, Malaya /M.O, Gens de Nantes
Grison Garde - Robillard	Haut-du-Cap	Robillard, Brisson

### **Activity 2: Detailed physical and agricultural inventory of selected Sub-Watersheds.**

The collection of data needed to produce the detailed sub-watershed level maps to be used by Sub-Watershed Management bodies began in earnest during the quarter, with the hiring of a permanent GIS assistant. A GIS database holding all data on the crop-production and natural-resource assets of the project's Target Zones, with a priority focus on the 12 Sub-Watersheds selected above, will be established and finalized in the next quarter with the aid of an international GIS STTA.

### **Activity 3: Initial Watershed Governance Meetings.**

IR 2 staff held over 20 meetings with local BACs, Local Governments (CASECs) and CBOs in the 12 selected Sub-Watersheds targeted for assistance, with the goal of developing Sub-Watershed Management Bodies (SWMBs). These initial meetings have been held not only to introduce the notion of SWMBs into the communities, but to help the IR 2 team to develop lists of key local resource people who will be called on to play a role in the launching of SWMBs.

### **Activity 4: Organization of Sub-Watershed Management Bodies.**

In the workplan, this activity was scheduled to start in July. It has been delayed due to the slower than expected process of GIS data collection and synthesis. With the completion of the initial meetings held under Activity 3, the preparation for this phase for this activity has been completed. Implementation will begin in earnest during the next reporting period in the Sub-Watersheds listed above.

### **Activity 5: Assessment of the sustainability of SWMBs in Limbé.**

This activity began during the last month of the period and will continue into the next reporting period. IR 2 staff have contacted all the Limbé Watershed SWMBs and collected information on their current members and activities. This will be verified in the actual evaluation to be conducted in October.

### **Activity 6: Implementation of follow-on assistance to Limbé SWMBs.**

This is on hold pending the results of the above evaluation.

## **SUB-RESULT 2.3: CRITICAL SLOPES STABILIZED THROUGH FARMER-LEVEL INVESTMENT**

IR 2 staff working with the GIS team and IR 1 staff concluded their intensive field investigations and GIS data analysis during the last quarter. The information emerging from this process has been used to identify critical zones requiring investments in hillside agro-forestry systems to combat soil erosion. Table 4 below shows the results of these investigations, quantifying the hectares in each Target Zone that require protection. A complete map of these zones appears in Annex A.

**TABLE 4: SUB-WATERSHEDS TARGETED FOR AGRO-FORESTRY INTERVENTIONS**

Target Zone	Watershed(s)	Sub-Watersheds Targeted for Agro-Forestry Interventions	No. of Ha Requiring Protection in Targeted Sub-Watersheds
Desroches -Limbé	N/A	N/A	0
La Suisse- Bord de Mer	Haut-du-Cap, Grande-Rivière du Nord	Larry	5,508
Limonade – Bois de Lance	Grande Rivière, Trou-du-Nord	Savanne au Camp	4,055
Bayaha- Maribaroux	Marion, Jassa	Dumas	117
Camp Coq- Marmelade	Limbé	Chaino, Camp Coq, Moreau, Nan Trimestre, Mouscadi	7,810
Sainte Suzanne - Gens de Nantes	Grande Rivière, Trou-du-Nord, Marion, Jassa	Morne Ouanche, Jolित्रou, Gringrin, Bois de Lance, Maquillon, Acul des pins, Francisque, Malaya, Gens de Nantes	1,2155
Grison Garde- Robillard	Haut-du-Cap	Robillard, Brisson	5,441
<b>Total</b>			<b>35,086</b>

The activities listed under SR 2.3 below are designed to both increase the productivity and expand the surface area of sustainable agroforestry systems on hillsides in the targeted areas listed in Table 4.

#### **Activity 1: Launching of nurseries for IR 2 agro-forestry systems.**

The IR 2 team is in the process of conducting a survey of agro-forestry nurseries in the targeted sub-watersheds listed in Table 4. A total of 60 nurseries have been identified with site evaluation visits still being undertaken by IR 2 staff. In the next period, the information will be analyzed to select the best 15 nurseries as the loci of propagation activities for IR 2 in the next year. These nurseries will also be targeted by IR 3 to receive business skills training.

#### **Activity 2: Training of fruit-tree grafters and operators of specialized plant propagation techniques.**

IR 2 staff have developed SOWs for the training agro-forestry grafters and yam mini-set operators. This activity will begin implementation in the next period.

**Activity 3: Introduction of small-farmer greenhouses.**

IR2 staff received technical materials from and had exchanges on greenhouses with WINNER staff during the reporting period. Three zones have been targeted for potential pilot greenhouse projects: Sainte Suzanne, Mont Organisé and Perches.

**Activity 4: Launching of fruit tree planting/grafting and other types of vegetative material as a response to larger scale rehabilitation needs.**

Identification of sites has begun. Implementation of this activity will hit full stride in the next planting season as the needed vegetative material becomes available.

**SUB-RESULT 2.4: CRISIS-MANAGEMENT CAPACITY STRENGTHENED****Activity 1: Assess local government emergency-preparedness capacities.**

The team has had discussions with the two Délégués Départementaux and has ascertained that a survey of local *comités de protection civile* has already been done in the region. The results of this assessment will be taken into consideration as the AVANSE team conducts its own evaluation, where this proves to be necessary. A SOW for the assessment has been drafted and will be implemented in the next quarter in cooperation with the Departmental authorities.

**Activity 2: Design of a strengthening program for local government emergency preparedness.**

This is on hold pending the assessment in the prior activity.

## IR 3: AGRICULTURAL MARKETS STRENGTHENED

IR 3 staff made a major push in the quarter to make contact with a wide range of private actors in order to establish the necessary contacts that will serve as the basis for market linkage and investment promotion interventions throughout the life of the AVANSE contract. In addition, the IR 3 team has put much emphasis on collecting data from a wide range of small and micro-enterprises in the Target Zones that are of relevance to the project. These actions, in addition to the analytical work completed during the quarter, have laid much of the basic foundation that will help frame and accelerate the project's engagement with the private sector during the next four and a half years.

### IR 3 LTTA staff as of September 30:

Marketing Specialist & IR3 Team Leader: **Rodlène Paul**

Agro-Processing Specialist: **Ewald Alcindor**

Business Planning Specialist: **James Weber**

Business Training Specialist: **Horiol Désile**

Access to Finance Specialist: Vacant

### SUB-RESULT 3.2: IMPROVED ACCESS TO STORAGE AND PROCESSING;

### SUB-RESULT 3.5: RELATIONSHIPS IN TARGETED VALUE CHAINS STRENGTHENED

#### Activity 1: Conduct initial value chain diagnostics

*Sub-Activity 1: Conduct analysis of market potential and key VC linkages for IR1 crops.* An STTA team conducted an abbreviated value-chain analysis of the five focus crops by looking specifically at market possibilities for producers in the north. The main points emerging from this study (by crop) are:

Cacao: (1) Post harvest losses are significant, due mainly to improper drying and unclear transmission of quality incentives in the unfermented cacao segment; (2) fermented cacao offers high potential returns, but the sustainability of existing efforts of FECCANO are uncertain due to high (subsidized) intermediation costs and low volumes, meaning that private-sector intervention in this area is highly desirable; (3) higher production densities will improve the feasibility and profitability of fermented cacao; and (4) all industrial cacao buyers are committed to buying certified cacao before 2016.

Bananas/Plantains: (1) Bananas are the most competitive of all the AVANSE focus food crops, given their large market in Port-au-Prince; (2) bananas from the North are perceived to be of higher quality in terms of taste, but they have higher intermediation costs and lower physical quality than Dominican bananas, meaning that there is substantial room for adding value through post-harvest improvements; and (3) Dominican exporters are interested in increasing the flow of bananas through the port of Manzanillo by working with Haitian producers in the North, but such projects will require increased production density, improved quality of production, and new investments in post-harvest handling centers.

Rice: (1) Rice from the region is heterogenous in terms of variety and subject to poor post-harvest drying, resulting in high loss rates during the milling process. These factors make it difficult to sell in Port-au-Prince, where imported rice is more competitive at the low end of the price spectrum; (2) most rice is consumed in the zone of production and does not travel long distances or reach high levels of



aggregation; (3) with such an atomized local market, it will be important for any increase in production to be accompanied by improvements in quality to yield a better, more standard product; otherwise, local market saturation may occur.

**Maize/Beans:** (1) Like rice, locally-produced maize and beans do not store well, and maize has high loss rates during processing that render the final product relatively expensive and not competitive in Port-au-Prince vis-à-vis maize imported from abroad or produced in other areas of Haiti; (2) a structured market exists for maize (WFP procurements) but the prices are low relative to regional prices; (3) improvements in post-harvest quality will be needed for both crops if the local product is to become competitive nationally.

Results from the value chain study have already been incorporated into the draft workplan submitted to USAID in September. The final version of the VC study was in the process of correction at the close of the reporting period and will be submitted in October.

*Sub-Activity 2: Identify and assess potential agro-enterprise clients in the Target Zones.* IR 3 staff and enumerators began systematic data collection on enterprises in the agricultural sectors, with a focus on small and micro-enterprises. A total of 600 enterprises had been identified by the end of September in the following categories: nurseries, plowing service providers, storage (inputs and crops), processing, cacao traders (*spéculateurs*), and food crop wholesalers. The survey was 80% complete at the end of the reporting period. When it is finalized, data will be centralized in the project GIS database and presented in a GIS results workshop in the next quarter.

*Sub-Activity 3: Assess constraints to women entrepreneurs in target value chains.* This work has been delayed. A Making Cents consultant has been identified and a SOW will be submitted for this activity to take place in November.

*Sub-Activity 4: Elaborate financial models of agro-enterprise client types.* Detailed cash-flow-based enterprise interviews have been completed for 4 foodstuffs processors, 3 nurseries, 2 storage companies, 1 agribusiness boutique, and 11 plowing companies, which include two vertically-integrated rice-milling groups. These models will be used to: (1) help the project set the terms of its input-voucher subsidy program to levels consistent with long-term agro-enterprise sustainability; (2) assess project investments in value chain enterprises through PPPs or grants; and (3) help the project design training activities around real business needs based on the financial analyses of the type of business that is being targeted. Most initial emphasis was given to plowing enterprises in order to facilitate integration into IR 1 crop itineraries during the next season. In the next reporting period, the focus of this work will turn towards nurseries and storage providers.

## **Activity 2: Conduct business skills and capacity-building training**

*Sub-Activity 1: Develop content of Agro-enterprise business skills training program in pilot sites (PO/Micro-enterprise and SMEs).* The start of this activity, originally planned for September, has been delayed until the next quarter. An STTA team from Making Cents will implement this in October.

## **Activity 3: Improve market storage infrastructure.**

*Sub-Activity 1: Identify and select target sites with government authorities.* The IR 3 Team Leader and the AVANSE DCOP held discussions with local government leaders during the quarter as a prelude to selecting three sites for consideration. This activity was terminated, however, during the month of September after receipt of comments from USAID on the draft FY 2014 workplan indicating that there



were serious doubts about the feasibility of this activity. It has been stricken from the final version of the FY 2014 workplan.

#### Activity 4: Improve private-sector/small-farmer linkages

*Sub-Activity 1: Foster improved linkages between the private sector and small farmers.* IR 3 staff made contact with numerous private-sector groups in order to generate: (1) new sales relationships for small farmer crops, with a primary focus on the five AVANSE target crops; and (2) potential investments in improved production, storage/packing and processing facilities that would serve small farmers in the Northern Corridor. Specific contacts made for both these objectives in the quarter are listed below in Table 5.

**TABLE 5: MARKETING CONTACTS/LINKAGES AND RESULTS (JULY – SEPTEMBER 2013)**

Name of Firm/Group, Location	Business Type	Meeting Objective	Results/Next Actions
Adolph Supermarket Miami FL	Ethnic Food Importer/Distributor	Assess possibilities for sourcing product.	Strong interest in <i>boules de cacao</i> . Explore possibilities for strengthening women's groups in zone to supply product that meets health standards.
Maison NOVELLA Cape Haitian	Cocoa exporter	Discuss about developing PPP for cocoa production & processing.	Draft MOU already developed. Need to review activities and responsibilities to finalize contract.
AGRITRANS Port-au-Prince	Commercial Farm	Develop PPP focusing on banana production and post-harvest handling .	Draft MOU already developed. Need to review activities and responsibilities to finalize contract.
FAMA Cap Haitian	Commercial Farm	Develop PPP focusing on banana production and post-harvest handling.	Draft MOU already developed. Need to review activities and responsibilities to finalize contract.
PISA/REBO Port-au-Prince	Cocoa/coffee and other local food products Exporter/distributor	Discuss PPP for production and marketing of fermented cocoa & rice purchasing .	Identified interest to work together to 1) develop certification for fermented cacao; 2) to invest in cocoa plantation; and 3) explore strong interest in partnership with AIGG (rice mill in Grison Garde for distribution of rice).
Banamiel Mazanillo, DR	Banana export company	Explore possibilities to develop partnership with Haitian producers.	Banamiel manager visited Haiti and discuss potential collaboration for developing banana export in Haiti. Strong interest to develop

<b>Name of Firm/Group, Location</b>	<b>Business Type</b>	<b>Meeting Objective</b>	<b>Results/Next Actions</b>
			partnership with Haitians suppliers.
Win Fresh United Kingdom	Banana importer/distributor in England	Explore possibilities to develop partnership with Haitian producers.	Win Fresh marketing manager visited Haiti to discuss sourcing banana from Haiti and expressed an interest in collaborating to help develop banana exports from Haiti.
SEPAC Port au Prince	Food distributor and ag-input supplier	Explore possibilities for sourcing rice and investing in rice mill with PPP.	Strong interest developing. Plan to organize visit to production sites and project staff.
Golden crown US & Haiti	Ethnic food importer/distributor	Exploring possibilities for sourcing cassava bread from Haiti.	Need to ship sample to the US.
Bravo North Miami FL	Ethnic Food Retailer	Looking to sell added value cocoa beans products, yam and plantains.	Manager waiting for samples to give purchasing order.
Chest Hill Farm Coral Gables, FL	Ethnic Food importer/distributor/farmer	Gain understanding of market demand for bananas and plantain.	Looking to purchase one container per week. Plan a trade mission to USAID/Haiti. Plantain would have to be packed by a certified packing house.
Newtown Chocolatier Newton, PA	Processor of cocoa beans paste; chocolate confectionary.	Looking for both unfermented and fermented cocoa beans.	Would need to see samples of fermented beans and cocoa bits.
OK US Fair Trade bananas	Distributor	Contacted buyer for market access of fair trade bananas.	Will sell all the bananas if the coop will get a return for each box of bananas sold.
Global Organics Arlington, MA	Looking for organic products.	Looking for US buyers for fermented beans.	Discuss conference in DR to source products from Haiti. Plan to meet with their buyers in DR.
United Groves, Homestead,	Farmer/Packer/Shipper	Market access for plantain and bananas.	Plan to travel to Haiti. Would be interested to form a joint venture with Haitian farmers.

Name of Firm/Group, Location	Business Type	Meeting Objective	Results/Next Actions
FL			
La Pâtisserie Bakery Inc. Miami FL	Haitian food manufacturer	Market access for value added product	Will be interested in value-added product – AK100, and <i>boule de chocolat</i> .
S & H Global, SA Parc Industriel de Caracol	Apparel manufacturer	Supplying corn, rice, plantains and beans to cafeteria for 20,000 employees by year 2016.	Documents provided have been submitted to their home office. Expect to meet for follow up by November.
Dan Dubinsky	Farmer/Packer/Distributor	Interested in pigeon peas up to 1,000 hectares.	Samples have been provided. Looking for market research on the shelf life of fresh pigeon peas prior partnering with farmers.

As a result of the above contacts, the following high-priority projects have been identified and will be pursued either with technical assistance and market linkages or within the framework of a PPP if there is the possibility for leveraging private sector investments (See Sub-Activity 2 below):

- Novella: large-scale investments in improved cacao production and processing;
- SEPAC: small-scale investment in rice milling and production;
- Banamiel/Agritrans/FAMA: improved production of bananas with export packing/handling component;
- Adolph Supermarket and various small ethnic product exporters: improved small-scale chocolate production and export; and
- REBO/PISA: certification of supply circuit for production of fermented cacao.

*Sub-Activity 2: Develop and implement Private-Public-Partnerships.* As a result of the meetings and talks held with the potential private sector partners listed above, the IR 3 team has developed three specific PPP opportunities that were in varying states of gestation at the close of the reporting period. These are described below:

PPP focusing on improved production and processing of unfermented cacao with NOVELLA. A draft PPP has been produced and discussed with NOVELLA under which NOVELLA, the leading cacao exporter in the North, would be willing to invest up to \$1 million over three years. The draft of the basic MOU between AVANSE and NOVELLA has been submitted to USAID. NOVELLA's contribution would be directed at subsidizing production and investments in farmer- and trader-level drying technology. AVANSE would also contribute to production and to working with the NOVELLA network of supplying *spéculateurs* to encourage more transparent incentive structures that reward proper farm-level drying and lead to reductions in the amount of cacao that fails quality-control tests.

PPP with the commercial Banana farms AGRITRANS and FAMA. Two commercial farming operations in the project zones with large farms (AGRITRANS and FAMA) are interested in developing large tracts with improved banana production for export and local market sales. They plan to also source bananas from surrounding small farmers and use their own post-harvest handling facilities for both their own harvest and the production they outsource to small farmers. The Dominican banana exporter Banamiel is a possible partner and co-investor and would provide access to its export market outlets in the EU. AVANSE is in the process of developing PPPs with both of these partners to support necessary post-harvest packing facilities, provide technical assistance, and help structure the relationships between the commercial farms and their out-growers.

### **SUB RESULT 3.3 INCREASED ACCESS TO FINANCIAL PRODUCTS**

#### **Activity 1: Launch agro-enterprise value-chain grants.**

This activity was planned to begin in the month of August but has been delayed since the AVANSE grants manual has not yet been approved. Nevertheless, other IR3 activities (notably the preparation of financial models for different categories of grants recipients and the development of PPP possibilities) are positioning the IR 3 team to be able to rapidly generate grants concepts and identify potential beneficiary candidates when the grants manual is approved.

#### **Activity 2: Identify and facilitate agro-enterprise client contacts with financial institutions.**

Implementation of this activity has been hampered by the delay in recruiting the IR 3 Access to Finance Specialist. Recruitment for this continued during the quarter, with over 700 CVs received for evaluation. Despite the vacancy of this position, several meetings were held between HIFIVE and IR 3 staff to facilitate the orientation of agro-enterprise credit requests to MFIs and financial institutions in the HIFIVE network.

#### **Activity 3: Support the development of mobile money products in the Project Zone.**

This Activity has been delayed until the first quarter of the next reporting period. A SOW for a design effort for this work was developed and will be contracted through the international NGO MEDA, which has access to personnel who have been instrumental in the launching of mobile money products with DIGICEL in Haiti.

### **SUB-RESULT 3.4: IMPROVED MARKET INFORMATION SYSTEMS**

#### **Activity 1: Inventory of existing MIS systems and design of project MIS strategy.**

This work will be undertaken by DAI's short term consultant, Edgar Ariza-Niño, following the completion of the ongoing economic crop modeling work under the project's Monitoring and Evaluation Component. This will begin in the second quarter of FY 2014.

#### **Activity 2: Reactivate Cacao MIS in the project zone.**

AVANSE presented a financing plan for restarting the 'kout lambi' SMS-based MIS system under financing from NOVELLA. This plan is set within the framework of the PPP that was awaiting approval from USAID at the end of the reporting period. It is anticipated that NOVELLA will agree to privately

finance the mechanism, which publicizes the price at which it purchases cacao at its factory gate, rendering the system sustainable with no financial commitment on the part of AVANSE.

## IR4: CAPACITY OF LOCAL ORGANIZATIONS STRENGTHENED

IR 4 staff and consultants completed initial surveys of both CBOs and NGOs who would be candidates for receiving direct funding from USAID under FORWARD objectives, and they completed the first IP Organizational Capacity Assessments (OCAs) for our consortium partners, AGRIDEV and AgroConsult. In addition, a major effort was

made during the reporting period to produce a draft MOU between the project and the MARNDR with a wide range of areas of collaboration, which are linked to a previously agreed-upon agenda for capacity building designed to entail both material assistance and technical training. These activities and others are described below.

### IR 4 LTTA staff as of September 30:

Senior Capacity-Building Specialist: **Michael Wilson**

Capacity-Building Officer: **Dialine Joseph**

Capacity-Building Officer: **Gueriney Jaclin**

Institutional-Strengthening Specialist: **Maryse Holly**

### SUB-RESULT 4.1 STRENGTHENING OF IPS AND POTENTIAL DIRECT-AWARD-HOLDERS TO RESPOND TO FORWARD OBJECTIVES

#### Activity 1: Conduct assessment of CBOs and agricultural support institutions in the zone.

With the active participation of local BACs, the IR 4 team completed an assessment of over 500 CBOs in the project target zone. The data from this assessment has been used to identify the most dynamic CBOs in the zone—CBOs that will be targeted to get management training under Activity 2, below.

#### Activity 2: Management Training Workshops held for CBOs.

The IR 4 team was drafting an SOW for one or more IP CBO capacity-building partners to provide these workshops at the end of the reporting period. An RFP will be issued in November to contract with capacity-building service providers specializing in CBO-level trainings.

#### Activity 3: Remediation actions for targeted CBOs.

No activity was planned or occurred in the quarter.

#### Activity 4: OCAs conducted for AGRIDEV and AgroConsult.

DAI's Mike Walsh worked with the IR 4 team to conduct OCAs for the two consortium partners in August. The results of these investigations will be presented to the two firms in October. This is progressing at a slower pace than initially envisioned, as it was initially thought that the OCAs would be done in July and the remediation work with AgroConsult and AGRIDEV would start in August.

#### Activity 5: Training workshops on compliance for NGOs and for-profit consulting firms.

The IR 4 staff worked with the other IR teams to draw up a preliminary list of 150 NGOs and for-profit consulting firms that are active in the technical domains of relevance to AVANSE. During the next reporting period, training workshops will begin for a sub-set of these NGOs and consulting firms, to be selected on the basis of their interest and level of confirmed activity.

**Activity 6: Remediation training programs for AGRIDEV and AgroConsult.**

This will begin in the following quarter.

**SUB-RESULT 4.2: GENERAL CAPACITY BUILDING FOR PARTNERS AND BENEFICIARIES IN TARGET ZONE.****Activity 1: Institutional capacity-building for the MARNDR.**

Under the direction of the DCOP, numerous meetings took place during the quarter between the DCOP and IR 1 and IR 2 teams and the main regional offices of the MARNDR—namely the two DDAs and the numerous local-level BACs. These meetings were used to prepare the way for two formal, one-day workshops held with the DDA from the North region in Limbé in July, and with the DDA from the North-East region in Fort Liberté in August. These workshops were used to identify specific institutional-strengthening needs of the individual BACs (in each the AVANSE target zones in each Department) most concerned by the specific IR1 focus crops. They also helped the participants to identify specific problems and needs at the levels of the two Departmental DDAs. The results of these workshops have yielded the elements of a MOU between the project and the MARNDR that has been submitted to USAID. Under the terms of this agreement, which was still under legal review at USAID at the end of the reporting period, AVANSE will provide: (a) training to BAC and DDA staff in the specific cropping models being used by the project so that they are able to participate in project extension activities; (b) a certain amount of material support to both BACs and MARNDR units in the project zone (this consist mainly of basic office furniture and IT equipment and software). In return, the MARNDR will make its staff available for participation in project activities as well as some of its material resources in the zone. The MOU also calls for policy-level collaboration between the MARNDR and the project, particularly with regard to the eventual implementation of the planned voucher activities for input subsidization under IR 1. The training programs and the material support may begin when USAID approves the draft MOU.

**Activity 2: Material support of the MARNDR.**

Following the approval of the MOU, AVANSE will execute grant or procurement actions that will provide the necessary material support to the MARNDR.

**Activity 3: Technical and financial capacity-building for agricultural support institutions.**

No actions were conducted for this activity during the reporting period.

## INFRASTRUCTURE COMPONENT

The infrastructure team made significant progress during the quarter. It completed preliminary site identification and began cost-benefit analyses of 20 road segments while also identifying 8 sites for irrigation and drainage improvements. This work was completed despite the fact that it still lacks three of the five engineers it requires to complete its staff. These positions will be

filled in the next quarter—which will be critical to the team’s ability to organize the detailed site technical surveys that will be needed in order for road and irrigation systems contracting to begin.

### **Infrastructure LTTA staff as of September 30:**

Infrastructure Specialist/Lead Engineer: **Yves Ducarmel François**

Senior Engineers (2): Vacant

Junior Engineer: **Cantave Obas**

Junior Engineer: Vacant

## **SUB RESULT 1.4: IRRIGATION SYSTEMS CONSTRUCTED/REHABILITATED AND MANAGEMENT CAPACITY OF USERS INCREASED**

### **Activity 1: Global assessment of drainage issues in key irrigated plains zones.**

The infrastructure team consulted with the DDAs in the North and North-East to identify six potential systems with drainage problems. Site visits conducted by the Lead Engineer led to the selection of three of these sites for possible project intervention to improve drainage. These sites are: Maribaroux (North-East), Dubré, and La Suisse (North). A map of all irrigation sites with drainage problems will be completed in the next quarter to aid in the identification of other potential sites.

### **Activity 2: Preliminary site assessments of potential irrigation sites.**

Site assessments were completed for the following five irrigation systems: Grison Garde, Roches Plates, Glaudine, Robino and Chalopin, which have been targeted for the first round of AVANSE irrigation rehabilitation works. Detailed site studies conducted by the MARNDR are underway at all these sites. The results of these studies will be used as input both to the cost-benefit analyses to be conducted by AVANSE and for the eventual construction contracting procurement.

### **Activity 3: Detailed cost-benefit analyses.**

These will begin in the next reporting period for the five sites listed above.

## **SUB-RESULT 2.2 CRITICAL SLOPES STABILIZED THROUGH PUBLIC WORKS**

Activity under this Sub-Result was supposed to begin in the month of September. Since this part of the AVANSE infrastructure works program is highly dependent on the finalization of the detailed Sub-Watershed investigations in the 12 Sub-Watersheds targeted for SWMB capacity building under IR 2, full implementation of this part of the program will be delayed until these investigations have collected sufficient data on potential sites. However, the Infrastructure and IR 2 staff coordinated to implement a special project protecting five gullies overhanging the Grison Garde irrigation system with 1,450 linear meters of living hedge rows in contour lines with a cash-for-work program. This activity was arranged on short notice following the visit of the President of the Republic to Grison Garde in June.

## SUB-RESULT 3.1: IMPROVED TRANSPORTATION INFRASTRUCTURE

### Activity 1: Identify and assess potential feeder road sites in Target Zones and key sub-watersheds.

The Infrastructure team conducted initial site visits and mapping exercises during the quarter for a total of 20 road segments as shown in Table 6, below. The list of roads given in Table 6 was derived from the inventory of priority roads given to the Infrastructure team by USAID. Two roads from this list (Plaine du Nord – Duty, and Duty – Grison Garde) were eliminated by the AVANSE team since the work originally foreseen for these areas is being funded by other donors.

### Activity 2: Detailed site visits and cost-benefit analyses of selected roads.

Preliminary CBAs have been completed for all 20 road segments. These are in the course of completion, with data being collected on traffic counts, project costs, and crop production—data which will be used to finalize these analyses in order for USAID and AVANSE to arrive at the final decisions on the proposed construction projects. In two cases, AVANSE staff have finalized the CBAs (these are for the Carrefour Seminaire – Acul Jeannot and the Grison Garde – Robillard roads) and are proceeding with the detailed technical surveys. All CBAs for the remaining 18 roads will be completed before December 2013.

**TABLE 6: TARGETED ROAD SEGMENTS**

Road number	Road name	Kilometers
<b>Mapping and preliminary CBAs completed</b>		
1	Bas-Limbé (Route Nationale) – Plage Caramel	13.75
2	Ravine Desroches – Carrefour George	1.24
3	Piatte – Borde de Mer	0.69
4	Carrefour Flaville – l'Acul du Nord	3.32
5	Camp Coq – Massabiel	7.01
6	Massabiel – Bassin – Marmelade	14.35
7	Carrefour Duty – La Bruyère	2.74
8	Carrefour Lacchaux – Route Touristique	3.94
9	Camp Mathurin – Rivière Sable	2.20
10	Dubré – Enbas-la-mer	0.98
11	Carrefour Montholon – Montholon	1.57
12	Limonade – Bois de Lance	5.92
13	Carrefour Juchereau – Roches Plates	5.22



Road number	Road name	Kilometers
14	Carrefour Frache – Grand Bassin	7.06
15	Carrefour Bergen – Haut Madeleine	3.95
16	Malféty – Millet	10.04
17	Route Nationale 6 – Coicou	1.84
18	Route Nationale 6 – La Garène	4.10
<b>CBA finalized</b>		
19	Carrefour Séminaire (Haut Limbé) – Acul Jeannot	2.65
<b>CBA finalized and technical site survey completed</b>		
20	Grison Garde – Robillard	5.14
<b>Total:</b>		<b>89.93</b>

## ENVIRONMENTAL COMPLIANCE

Environmental compliance activities during the quarter were as follows:

### **Preparation of the project's Environmental Mitigation Plan and Report (EMPR).**

After receiving comments on the draft EMPR from USAID in August, AVANSE's STTA environmental compliance specialist responded to the comments and a revised plan was submitted to USAID in September. IR 1 and IR 2 staff also provided much input for the revised EMPR. The project EMPR was still in draft form and had not been approved at the close of the reporting period.

### **Environmental Compliance LTTA staff as of September 30:**

Environmental Compliance Officer: Vacant

Project Environmental Monitoring Assistant: **Frantz Dorvil**

### **Recruiting for a Project Environmental Officer (PEO).**

Much effort was focused on recruiting the AVANSE PEO during the quarter. A candidate was identified, submitted to USAID, and approved in September. He will be joining the project in October.

### **Implementation of environmental compliance mitigation measures.**

Since implementation of field activities with environmental impacts has yet to begin under IR 1, IR 2 or IR 3, the launching of the environmental mitigation measures foreseen in the AVANSE draft EMPR has yet to begin. During the quarter, however, mitigation measures were devised by the junior Environmental Compliance Specialist for three specific activities: (1) rehabilitation of the road segment between Grison Garde and Robillard; (2) ongoing maintenance of the irrigation canal in the Grison Garde system; and (3) hillside slope protection through planting of hedgerows on gullies above the irrigation system. The details of the mitigation measures planned for these activities are given in the tables that appear in Annex C.

## MONITORING & EVALUATION

Monitoring & Evaluation activities during the quarter included:

### **Activity 1: Develop the project's M&E Plan.**

Comments on the draft M&E Plan were received in September from USAID. The AVANSE M&E team, with support from the international M&E Specialist Glenn Smucker and local M&E Specialist Budry Bayard, immediately began work on responding to these comments, and they were finalizing the revised M&E Plan at the close of the reporting period.

### **M&E LTТА staff as of September 30:**

Monitoring and Evaluation Manager: **Jean Chariot Michel**

Economist/Economic Analyst: **Lonège Ogisma**

Monitoring and Evaluation Officer: **Eril Joseph**  
(begins work October 1<sup>st</sup>)

Monitoring and Evaluation Assistant: **Rodney Davermann**

### **Activity 2: Develop target crop production models based on beneficiary farmer profiles.**

Work on this activity began in September with the arrival of international STTA Agricultural Economist, Edgar Ariza-Niño. This work will be completed in close coordination with IR 1, with the aid of the team's LTТА economist. Mr. Ariza-Niño's first mission served to verify the agronomic crop models and farm models for the crops with finalized production models from IR 1. Data requirements have been determined, and the project team will begin to collect the necessary farm-level data before the second scheduled trip from Mr. Ariza-Niño. This activity was scheduled to have begun in July, but has been postponed due to delays in the finalization of the focus crop models from IR 1.

### **Activity 3: Baseline crop survey of farmers and ethnographic survey.**

Actual implementation of baseline crop surveys can only begin in the next quarter when the rolls of Farmer Field School (FFS) participants have been finalized for all crops. As of the end of the reporting period, this was only the case for cacao FFSs. During September, the team began finalizing questionnaires and structuring the resulting database for both the crop surveys and the rapid ethnographic survey.

## GENDER INCLUSION

AVANSE's approach to gender inclusion is based on mainstreaming gender principles into ongoing programming under the four operational IRs. During the month of July, the LTТА Gender Specialist worked with STТА Sam Sternin from Making Cents to deliver a staff gender-planning workshop to identify main gender issues in each IR. Following the workshop, where initial recommendations were developed, the AVANSE IR Teams and Gender Specialist devised a list of concrete programming measures to ensure mainstreaming in each IR. The measures decided are given below:

**Gender Inclusion LTТА staff as of September 30:**

**Gender Specialist: Myrta Eustache**

### **IR 1:**

- Establish a minimum target of 30% of women participation in FFS for all IR1 crops;
- Use the results of the gender analysis to set targets for women participation as IR1 service providers—notably in voucher program qualification (nurseries, grafters, mill owners, etc.);
- Establish a minimum target of 30% for women-headed households in WUA management bodies;
- Distinguish the input of women's groups from that of men's groups when incorporating this information into initial WUA diagnostics of challenges to irrigation system maintenance; and
- Establish a specific target for women's participation in drylands development grants projects (TBD).

### **IR 2:**

- Establish a minimum threshold of at least 40% for women's participation in IR 2 producer organizations implementing cropping packages;
- Elaborate a training program that takes into account constraints on women's time availability;
- Establish a minimum threshold for women's participation in SWMB committees (still TBD);
- Establish a minimum threshold of 40% for women's participation in cash-for-work hillside-stabilization works; and
- Ensure training of women to participate in monitoring activities related to hillside soil conservation (monitoring tree planting sites, upkeep of soil retention, etc.).

### **IR 3:**

- Identify of women-owned enterprises in initial agro-enterprise survey data collection to facilitate targeting of women entrepreneurs;
- Elaborate specific training models at ME and SME levels for all women's groups (women entrepreneurship training);
- Focus post-harvest storage investment or grant actions on individual Madame Saras in key zones (as opposed to focusing on Producer Organizations);
- Develop formalization assistance program for women micro-entrepreneurs;
- Work with MFIs/Banks to diffuse financial products for Madame Saras; and
- Promote the use of mobile money technology as way of addressing women's security concerns.

### **IR 4:**

- Rate CBOs receiving institutional capacity building on their gender inclusiveness; and
- Ensure that OCAs of IPs include a gender inclusiveness rating.

# ANNUAL PROGRESS REPORT

This first annual progress report covers the period from project launch through the end of the fiscal year and is an abbreviated version of future reports, which will cover a full, twelve-month period.

During the first six months, AVANSE has laid solid foundations for the remaining four and a half years. An office has been set up and staffed; technical staff have collected data on the project sites and potential partners and have planned the first round of field interventions that are about to begin under IR 1 and IR 2. The achievement of tangible results from project implementation activities will not be visible until the key IR 1 and IR 2 field crop production activities have begun to bear fruit, which cannot be expected until the results of this main planting season are felt at the beginning of the next fiscal year. Nevertheless, even after six months it is possible to identify preliminary successes and challenges as well as subjects meriting further discussion with USAID. These are summarized briefly below in the elaboration of successes and challenges. This section of the Annual Report then closes with Table 7, which offers a general perspective on the implementation status of the major activities in the initial six-month draft workplan.

## MAJOR SUCCESSES

### **Rapid project start-up.**

In the space of six months, the AVANSE team grew from zero to 59 total project staff, with most of the key technical project leaders hired in the first month of the project. The technical team was able to produce the first workplan within forty-five days of contract signature and begin to plan field activities—particularly the procurement of cacao planting material in June in order for it to be ready for planting in the main October-November planting window.

### **Collection and processing of GIS data on sites and partners.**

All the AVANSE IR teams have been collecting significant amount of data on their partners and potential sites. This includes both data on agricultural land use and resources available from CNIGS and MARNDR sources, and from satellite imagery as well as site visits and surveys administered to micro- and small enterprises, farmer organizations, and local authorities. This data has been used to produce analyses that have led to the selection of the critical crop implementation sites for IR 1 and the hillside areas needing protection under IR 2. A site location study has been produced (see Annex A) and a more general GIS presentation showing the location of IR 1, IR 2 and IR 3 partners will be given to USAID and other partners early in the next reporting cycle.

### **Establishment of a solid working relationship with the MARNDR.**

The first six months have been marked with many formal and informal exchanges between AVANSE staff at all levels and personnel from the MARNDR. With two formal workshops held with the DDAs from the North and the North-East, as well as meetings at the Ministerial Cabinet level in Damien, the AVANSE team, led by its DCOP, has made the necessary high-level contacts at the central offices of the MARNDR and in the region to ensure successful collaboration. The team has done the necessary groundwork to put together the terms of an agreement that will have local MARNDR staff from the BACs participating side-by-side with AVANSE staff in farmer training sessions and in working to implement

the planned agricultural input voucher scheme that will be ramped-up gradually during the next year. This operational level is mirrored by capacity building and material aid for the Ministry where such aid is needed to enable its staff to contribute to AVANSE activities. A MOU that would make this official has been prepared, and it is under review by USAID at the close of the reporting period.

## **MAJOR CHALLENGES**

The rapid start-up of a large number of activities in a short period of time has naturally created some challenges for the AVANSE team. The main challenges are listed below.

### **Replacement of initial Chief of Party**

Over the initial months of the project, DAI recognized the need for a strong management Chief of Party. With the departure of our original COP, we placed Max Goldensohn in the position of Acting to Chief of Party, while the home office conducts a search for an appropriate leader for a project of AVANSE's scope and complexity.

### **Ensuring collaboration needed between the different IR teams.**

With an ambitious set of initial activities to be implemented by each IR at project start-up, it is somewhat understandable that they narrowly focus upon their planned objectives. However, this “tunnel focus” of the IR teams needs to be widened to permit the level of collaboration that must exist between the teams for AVANSE to succeed. The AVANSE management team recognizes this as a challenge and will seek to foster a higher level of cooperation between the staff of the different IRs as the project moves forward. To this end, the team has instituted weekly technical meetings attended by the COP, DCOP, IR Leads and the Senior Finance and Administration Officer as well as a technical issue tracker that is used to monitor progress in resolving on-going issues.

### **Recruitment: the IR 3 Access to Finance Specialist position is significantly behind schedule.**

Recruitment efforts to date have not identified a suitable candidate for this post—even after receiving over 700 applications. This is causing delays in an important component of IR 3. AVANSE management will need to discuss possible revisions of the post and make a renewed effort to entice a person with the necessary mid- to high-level credit background to relocate to Cape Haitian.

### **Accessing expertise in financial management to help the IR 4 team.**

Many of the challenges facing IR 4 require expertise in financial management of NGOs and consulting firms. The IR 4 team is currently short-staffed on such expertise. AVANSE management will need to consider how to ensure that staff working on OCAs and remediation plans for IPs that require a high level of expertise in financial management receive the support needed. At the close of the reporting period, the AVANSE team had identified one candidate with the required background, but it was not yet clear what the results of this recruitment will be.

## WORKPLAN IMPLEMENTATION STATUS

The following table provides a summary of the state of progress to date on the Sub-Results in the AVANSE contract:

**TABLE 7: WORKPLAN ACTIVITY IMPLEMENTATION STATUS**

Sub-Result	Implementation Status	Reasons for Delays (if any)	Outlook for Next Year
<b>IR 1: Agricultural Productivity Increased</b>			
Sub-Result 1.1: Knowledge and Availability of Improved Production Technologies and Systems Increased	Minor delays	<ul style="list-style-type: none"> <li>Delays in mobilization of certain IR 1 LTTA and STTA crop experts has pushed back the finalization of 4 of the 5 technical crop models</li> <li>The necessity of obtaining waivers for purchasing planting materials has delayed procurement of planting materials for some focus crops</li> </ul>	<ul style="list-style-type: none"> <li>Preparation of the basic economic models calculating the returns to the focus crops (under M&amp;E below) will be completed 3 to 4 months behind what was foreseen in the draft initial six-month workplan; but this will not significantly affect overall IR 1 progress</li> <li>FFSs will still begin for all crops in the fall planting season as scheduled, but the shortened procurement cycle for planting material acquisition will make it harder to ensure quality</li> </ul>
Sub-Result 1.2: Strengthened Extension of Agriculture Technologies	On track		<ul style="list-style-type: none"> <li>Few activities were scheduled in the year; the gender analysis was the primary one, and it was completed on time</li> <li>Major round of RFPs for extension IPs under IR 1 will start in February/March. This is still on track.</li> </ul>
Sub-Result 1.3: Access to Inputs Increased	On track		<ul style="list-style-type: none"> <li>Input voucher design effort was under way at close of year. Plans exist for an initial test campaign for bananas, cacao and rice in the winter season and a full roll-out of a large-scale voucher program for inputs in the fall of 2014.</li> </ul>
Sub-Result 1.4: Management Capacity of Water-User Associations Increased	Significant delays	<ul style="list-style-type: none"> <li>Delay in the mobilization of LTTA Water-User Association Specialist.</li> </ul>	<ul style="list-style-type: none"> <li>This is 3 to 4 months behind schedule. The calendar has been adjusted in the new workplan. The impact of this on overall results will be minimal, since the mobilization of the WUA Specialist in September coincides with the identification of the first Irrigation systems targeted for rehabilitation by the infrastructure team, so the initial WUA assessments in these zones will not suffer delays</li> </ul>
Sub-Result 1.5: Property Security Strengthened	Minor delays	<ul style="list-style-type: none"> <li>Due to slower than planned staffing-up of the full IR1 team, the team's members have been unable to devote the necessary attention to this set of activities</li> </ul>	<ul style="list-style-type: none"> <li>This set of activities will be implemented with some delays that can be reduced by fast-tracking in the next two quarters.</li> </ul>
<b>IR 2: Watershed Stability Improved</b>			
Sub-Result 2.1: Watershed Governance Bodies Established at the	Minor delays	<ul style="list-style-type: none"> <li>Due to delays in setting up GIS systems and the need for IR 2 staff to organize hillside retention site work in Grison Garde, the establishment of SWMBs is</li> </ul>	<ul style="list-style-type: none"> <li>The delays encountered to date should not seriously affect the overall goal of establishing SWMBs in 12 sub-watersheds by the close of spring 2014.</li> </ul>

Sub-Result	Implementation Status	Reasons for Delays (if any)	Outlook for Next Year
Sub-Watershed Level		2 months behind schedule	
Sub-Result 2.3: Critical Slopes Stabilized Through Farmer-Level Investment	On track		<ul style="list-style-type: none"> <li>This set of activities is on schedule to accompany the SWMB management activities under SR 2.1.</li> </ul>
Sub-Result 2.4: Crisis Management Capacity Strengthened	Significant delays	<ul style="list-style-type: none"> <li>This activity has fallen behind schedule by 3-4 months. The main reason is that the IR 1 Crop Production Leader, who has been designated as the driver of this activity, has been exclusively focused on IR 1 implementation.</li> </ul>	<ul style="list-style-type: none"> <li>Responsibility for the implementation of this activity will be broadened to Senior Project Management (DCOP or COP) in an effort to speed up its implementation in the next year.</li> </ul>

### IR 3: Agricultural Markets Strengthened

Sub-Result 3.2: Improved Access to Storage and Processing; Sub-Result 3.5 Relationships in Targeted Value Chains Strengthened	Minor delays	<ul style="list-style-type: none"> <li>The basic diagnostic work (VC study, enterprise cash-flow models, SME surveys) are on track. So is the Linkage work and PPP development. However, minor delays have arisen in the assessment of constraints to women entrepreneurs and in the development of business-training packages.</li> </ul>	<ul style="list-style-type: none"> <li>The delays in the scheduling of SME training package development and in the assessment of constraints to women entrepreneurs in the zone will be recuperated in the next reporting period.</li> </ul>
Sub Result 3.3 Increased Access to Financial Products	Significant delays	<ul style="list-style-type: none"> <li>The absence of the LTTA Access to Finance Specialist has seriously retarded the implementation of this line of activities</li> </ul>	<ul style="list-style-type: none"> <li>Project management will need to discuss with USAID the revision of the position description for this difficult to fill vacancy. This is a high-priority management issue for the project.</li> </ul>
Sub-Result 3.4: Improved Market Information Systems	Minor delays	<ul style="list-style-type: none"> <li>The implementation of planned improvements in cacao MIS in the zone are proceeding on schedule;</li> <li>The work foreseen on a more general agricultural MIS has been delayed by the availability of the STTA selected to do the design work foreseen in the last quarter of FY 2013.</li> </ul>	<ul style="list-style-type: none"> <li>The general MIS work will be rescheduled to early 2014 to coincide with the availability of the STTA expert.</li> </ul>

### IR4: Capacity of Local Organizations Strengthened

Sub-Result 4.1 Strengthening of IPs and potential direct award-holders to respond to FORWARD objectives	Significant delays	<ul style="list-style-type: none"> <li>Delays in mobilizing IR 4 staff have contributed to slower-than-expected finalization of OCAs and the design of remediation programs for the two IPs evaluated to date.</li> </ul>	<ul style="list-style-type: none"> <li>Project management may need to look for alternative ways of strengthening the IR 4 team's access to expertise in financial management, if there are more delays in recruiting a team member with the required skills.</li> </ul>
Sub-Result 4.2: General Capacity Building for Partners and	On track		<ul style="list-style-type: none"> <li>While this set of activities is largely on track, it will be important that IR 4 coordinate with IR 1 and IR 2 in particular in order to identify and assess</li> </ul>



Sub-Result	Implementation Status	Reasons for Delays (if any)	Outlook for Next Year
Beneficiaries in Target Zone			the strengthening needs of general agricultural support institutions early in the next year, as this new focus of activity will gain momentum at that time.

#### IR1, IR2 & IR3: Infrastructure Component

Sub Result 1.4: Irrigation Systems Constructed/Rehabilitated and Management Capacity of Users Increased	On track		<ul style="list-style-type: none"> <li>Although initial site identification and preliminary analyses are largely on track, vacancies for engineering positions will lead to delays in conducting detailed site surveys and full CBAs if they are not soon filled.</li> </ul>
Sub-result 2.2 Critical Slopes Stabilized Through Public Works	Minor delays	<ul style="list-style-type: none"> <li>This has been delayed to some extent by resource issues within IR2 and delays in the recruitment of GIS staff.</li> </ul>	<ul style="list-style-type: none"> <li>This should be resolved in early fiscal 2014 as IR 2 teams focus on the 12 selected sub-watersheds.</li> </ul>
Sub-result 3.1: Improved Transportation Infrastructure	On track		<ul style="list-style-type: none"> <li>After the initial batch of feeder roads has transitioned into construction, the infrastructure team will assess needs for the rehabilitation of additional road segments.</li> </ul>

# ANNUAL RESULTS REPORT

This section of the Annual Report presents a summary of the state of AVANSE's achievements against the defined performance indicators as given in the project M&E Plan. As noted in the Foreward to the Annual Report, the fact that this Annual Report covers only the first six months of the project, before implementation of field activities has begun, means that most targets for FY2013 have been set to zero.

**TABLE 8: AVANSE PERFORMANCE INDICATORS<sup>1</sup>**

Ind#	Description	Baseline FY 12	FY 13 Target	FY 13 Actual	Results to FY 13	FY 14 Target	FY 15 Target	FY 16 Target	FY 17 Target	LOP Target	Remarks
0.1 FitF 4.5.2 -13	Number of rural households benefiting directly from USG interventions (S)	0	0	0	0	10,000	30,000	42,000	43,500	43,500	The project has identified an initial list of prospective beneficiary planters by target crop.
0.2 FTF4 .5.2- 36	Value of exports of targeted agricultural commodities as a result of USG assistance (S)	5,040,000	0	0	5,040,000	5,392,800	5,644,800	6,300,000	7,308,000	7,560,000	Targets are based on FY 2012 value. New data for fiscal year 2013 will be collected in first quarter of FY 2014.

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<sup>1</sup> FY 13 targets noted in this table reflect Performance Indicator Values of the October 25 submission of a revised draft of the M&E Plan. Most services to project beneficiaries will begin in FY 2014. Targets and baseline values in the above table listed as TBD will be set during a November 2013 AVANSE retreat and submitted to USAID along with possible revisions of existing targets for approval in early December 2013.

Ind#	Description	Baseline FY 12	FY 13 Target	FY 13 Actual	Results to FY 13	FY 14 Target	FY 15 Target	FY 16 Target	FY 17 Target	LOP Target	Remarks
0.3	Volume of cacao exports as a result of AVANSE assistance.	2,400	0	0	2,400	2,568	2,688	3,000	3,480	3,600	Targets are based on FY 2012 volume. New data for fiscal year 2013 will be collected in first quarter of FY 2014.
0.4 FTF 4.5- 11	Market discount of targeted agricultural commodities	7%	0%	0%	7%	4%	2%	0%	0%	0%	This covers cacao, which is the only crop for which Haitian exports are quoted as a standard percentage with reference to world market prices.
0.5	Net combined effect of price and volume changes of cacao exports in northern region (percentage increase)	0%	0%	0%	0%	1%	3%	7%	13%	13%	
0.6	Average increase in agricultural income for project beneficiaries from AVANSE activities	0%	0%	0%	0%	10%	30%	60%	90%	100%	Baseline studies will be conducted during the first quarter of FY 2014. The project has identified an initial list of prospective beneficiary planters by target crop.

Ind#	Description	Baseline FY 12	FY 13 Target	FY 13 Actual	Results to FY 13	FY 14 Target	FY 15 Target	FY 16 Target	FY 17 Target	LOP Target	Remarks
0.7	Number of beneficiary households with doubled agricultural income from targeted crops in northern region due to AVANSE activities	0	0	0	0	1,500	7,500	14,700	21,750	21,750	Baseline studies will be conducted during the first quarter of FY 2014. The project has identified an initial list of prospective beneficiary planters by target crop.
1.1 FTF, F 4.5- 16,1 7,18	Gross margin per hectare, animal or cage of selected product (RiA)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	0	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	Baseline Survey of farmers in target zones will be conducted during the first quarter of FY 2014 to elicit information on Gross margin for selected crops and define targets.
1.2 FTF 4.5.2 -23	Value of incremental sales (collected at farm-level) attributed to FTF implementation (RiA)	0	0	0	0	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	Information on product sales will be gathered via a post harvest Baseline Survey of farmers in first quarter of FY 2014.
1.3 FTF, F 4.5.2 -5	Number of farmers or others who have applied new technologies or management practices as a result of USG assistance (RiA) (WOG)	0	0	0	0	5,000	20,000	30,000	40,000	40,000	The project has identified an initial list of prospective beneficiary planters by target crop.

Ind#	Description	Baseline FY 12	FY 13 Target	FY 13 Actual	Results to FY 13	FY 14 Target	FY 15 Target	FY 16 Target	FY 17 Target	LOP Target	Remarks
1.4 F 4.5.2 -2	Number of hectares under improved technologies or management practices as a result of USG assistance (RiA) (WOG)	0	0	0	0	5,000	15,000	25,000	35,000	35,000	
1.1.1	Yield increase for targeted crops of assisted farmers due to AVANSE activities	0%	0%	0%	0%	0-50% according to target crop	10% - 100% according to target crop	15% - 200% according to target crop	20% - 200% according to target crop	20% - 200% according to target crop	Baseline Survey will be conducted during the first quarter of FY 2014.
1.2.1 FTF 4.5.2 -7	Number of individuals who have received USG supported short-term agricultural sector productivity or food security training (RiA) (WOG)	0	0	0	0	10,000	25,000	35,000	43,500	43,500	
1.3.1	Number of farmers who have access to improved agricultural inputs due to AVANSE activities	0	0	0	0	10,000	30,000	42,000	43,500	43,500	

Ind#	Description	Baseline FY 12	FY 13 Target	FY 13 Actual	Results to FY 13	FY 14 Target	FY 15 Target	FY 16 Target	FY 17 Target	LOP Target	Remarks
1.4.1 FTF 4.5.1 -28	Hectares under new or improved/rehabilitated irrigation and drainage services as a result of USG assistance (RiA) (WOG)	0	0	0	0	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	Preliminary work to determine targets will be done during the first quarter of FY 2014.
1.5.1 FTF 4.5.1 -22	Number of rural hectares mapped and adjudicated (S)	0	0	0	0	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	Land tenure study of irrigation perimeters will be undertaken once targeted have been finalized in the first quarter of FY 2014.
2.1 FTF 4.8.1 -26	Number of hectares of biological significance and/or natural resources under improved natural resource management as a result of USG assistance	0	0	0	0	12,000	15,000	18,000	23,000	23,000	
2.2	Volume of soil preserved in upper watershed areas	0	0	0	0	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	Preliminary work to determine targets will be done during the first quarter of FY 2014. Baseline will be established in response to Mission advice on the formula for data collection.

Ind#	Description	Baseline FY 12	FY 13 Target	FY 13 Actual	Results to FY 13	FY 14 Target	FY 15 Target	FY 16 Target	FY 17 Target	LOP Target	Remarks
2.1.1	Number of Sub-Watershed Management Bodies formed	0	0	0	0	2	6	10	12	12	
2.2.1	Kilometers of bio-physical conservation structures built/rehabilitated (farm level)	0	0	0	0	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	Targets will be established during the first quarter of FY 2014.
2.3.1	Tree planting survival rates	0	0	0	0	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	Targets will be determined during the first quarter of FY 2014.
2.3.2	Kilometers of bio-physical conservation structures built/rehabilitated (public work)	0	0	0	0	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	Preliminary work by the infrastructure unit to determine targets will be done during the first quarter of FY 2014.
2.4.1 F 4.8.2 -26	Number of stakeholders with increased capacity to adapt to the impacts of climate variability and change as a result of USG assistance	0	0	0	0	3,000	6,000	8,000	10,000	10,000	

Ind#	Description	Baseline FY 12	FY 13 Target	FY 13 Actual	Results to FY 13	FY 14 Target	FY 15 Target	FY 16 Target	FY 17 Target	LOP Target	Remarks
3.1 FtF 4.5.2 -38	Value of new private sector investments in the agricultural sector or food chain leveraged by FTF implementation (RiA)	0	0	0	0	500,000	1,500,000	2,500,000	3,500,000	3,500,000	The IR 3 team conducted an initial inventory of 810 agro-businesses in target zones.
3.2	Value of incremental agribusiness sales due to AVANSE assistance	0	0	0	0	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	Information on sales will be gathered through survey of agribusiness to determine targets during the first quarter of FY 2014. The IR 3 team has completed an initial inventory of 810 agro-businesses in target zones.
3.3 FTF 4.5.2 -43	Number of firms (excluding farms) or Civil Society Organizations engaged in Agricultural and Food security-related manufacturing and services now operating more profitably (at or above cost) because of USG assistance (RiA)	0	0	0	0	375	450	525	600	600	IR team 4 conducted an inventory of 710 CBOs and 150 NGOs in target zones.



Ind#	Description	Baseline FY 12	FY 13 Target	FY 13 Actual	Results to FY 13	FY 14 Target	FY 15 Target	FY 16 Target	FY 17 Target	LOP Target	Remarks
3.1.1 FTF, F 4.5.1 -17	Kilometers of roads constructed or repaired with USG assistance (RiA) (WOG)	0	0	0	0	40	70	100	122	122	Targets will be established once roads to be rehabilitated /constructed are determined. This will be done during the first quarter of FY 2014.
3.1.2 F 4.4.3 -7	Number of beneficiaries receiving improved transport services due to USG assistance	TBD (to be filled in 12/2013)	0	0	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	Targets will be established once roads to be rehabilitated /constructed are determined. This will be done during the first quarter of FY 2014.
3.2.1	Number of storage facilities installed as a result of AVANSE activities	0	0	0	0	5	15	25	30	30	
3.2.2	Number of processing facilities established or improved due to AVANSE assistance	0	0	0	0	2	5	8	10	10	
3.3.1 FTF, F 4.5.2 -29	Value of agricultural and rural loans (RiA) (WOG)	0	0	0	0	100,000	300,000	500,000	750,000	750,000	Baseline data will be gathered in the first quarter of FY 2014 by surveying lending institutions and a sampling of farmers.

Ind#	Description	Baseline FY 12	FY 13 Target	FY 13 Actual	Results to FY 13	FY 14 Target	FY 15 Target	FY 16 Target	FY 17 Target	LOP Target	Remarks
3.4.1	Number of farmers accessing market information	0	0	0	0	4,000	12,000	24,000	30,000	30,000	Baseline data will be gathered during the first quarter of FY 2014.
3.5.1 FTF, F 4.5.2 -12	Number of public-private partnerships formed as a result of USG assistance	0	0	0	0	1	2	3	3	3	
3.5.2 FTF 4.5.2	Number of jobs attributed to FTF implementation (RiA)	0	0	0	0	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	Preliminary work is underway to determine targets during the first quarter of FY 2014.
4.1F TF 4.5.2 -11	Number of food security private enterprises, producers organizations, water users associations, women's groups, trade and business associations, and CBOs receiving USG assistance (RiA) (WOG)	0	0	0	0	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	The IR 4 team has carried out an inventory of 710 CBOs and 150 NGOs. Targets will be determined during the first quarter of 2014.

Ind#	Description	Baseline FY 12	FY 13 Target	FY 13 Actual	Results to FY 13	FY 14 Target	FY 15 Target	FY 16 Target	FY 17 Target	LOP Target	Remarks
4.1.1 CBL D-5	Score, in %, of combined key areas of org capacity amongst USG direct & indirect local implementing partners (S)	0%	0%	0%	0%	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	The IR 4 team has carried out an inventory of 710 CBOs and 150 NGOs. Targets will be determined during the first quarter of 2014.
4.2.1 F, FTF 4.5.2 -42	Number of private enterprises, producers organizations, water users associations, women's groups, trade and business associations, and CBOs that applied new technologies or management practices as a result of USG assistance (RiA) (WOG)	0	0	0	0	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	TBD (to be filled in 12/2013)	The IR 4 team has carried out an inventory of 710 CBOs and 150 NGOs. Targets will be determined during the first quarter of 2014



# ANNEX A: GEOGRAPHIC SITE SURVEY

## CONTEXTE DE L'ETUDE

Le corridor du Nord comprend cinq agro-climats interconnectés qui sont les plaines arides, les plaines humides, les montagnes humides, les basses montagnes semi-humides, et le piedmont, dont chacun prend en charge une combinaison différente d'espèces agricoles et nécessite des approches différentes pour augmenter la production et atteindre la durabilité. Il existe des différences importantes entre les agriculteurs de montagne, de piedmont et de plaines. Les agriculteurs de montagne sont généralement enfermés dans leur unique système « Jàden kreyòl » basé sur des associations de cultures (polyculture) et à un très faible niveau, la monoculture. Encourager ces agriculteurs à adopter de nouvelles pratiques nécessite l'analyse de leurs systèmes de culture dans son ensemble, pour ne pas vulgariser des technologies qui dérangent le système cultural plutôt de l'améliorer.

Cependant, les agriculteurs des plaines ayant un potentiel plus élevé pratiquent un autre système de cultures basé sur la monoculture avec un modèle fixe de rotations et démontrent une plus grande capacité à adopter de nouvelles pratiques basées sur des incitations économiques. Ces petits agriculteurs sont beaucoup plus ouverts à d'autres alternatives et nous avons adapté notre approche de AVANSE en conséquence.

Notre approche est construite autour de deux aspects fondamentaux : le premier est une logique d'aménagement du territoire, organisé autour de l'impératif d'améliorer la gestion des ressources naturelles (GRN) dans les six bassins versants ciblés. Cette logique est centrée autour des activités de IR2 qui va aider les petits agriculteurs et les autorités locales à comprendre l'impact environnemental de différentes pratiques agricoles, à améliorer les systèmes de culture pour réduire la pression sur les facteurs environnementaux clés (et surtout, l'érosion des sols). Le deuxième aspect est d'inventorier des besoins et des potentialités en ressources naturelles de bassins versants; de suivre l'élaboration des plans de gestion améliorés des bassins versants avec les acteurs locaux, et de faire ou catalyser les investissements nécessaires identifiés dans ces plans. Il s'agit d'une logique de planification, tirée par les deux objectifs de réduction des dommages causés par le ruissellement de l'eau non contrôlée, et les baisses de rendement liées à la productivité à long terme qui menacent la durabilité de la petite agriculture.

Compte tenu des limitations en ressources environnementales, AVANSE se focalisera sur les activités de support de production d'IR1, dans les plaines pour les cinq cultures de base (maïs, riz, banane, haricots et pois) et le piedmont pour le cacao. Bien que le maïs, le haricot et la banane soient cultivés à la fois sur les montagnes et les plaines, nous allons appuyer ces cultures dans les plaines où il y a la plus forte concentration de la production—et parce que le haricot et le maïs sont des cultures très érosives en montagne en l'absence de structures de protection des sols ou d'intégration dans les systèmes diversifiés, dénommés « Jàden kreyòl ». La production agricole se fera à travers des techniques non-érosives, sur les fortes pentes des sous-bassins versants ciblés par IR2. Pour nous permettre d'aboutir à la valorisation du potentiel agricole du Nord et du Nord-Est et la sécurité environnementale, une cartographie des zones de concentration est incontournable.

## CADRE CONCEPTUEL

La concentration géographique est définie comme la distribution du poids des unités spatiales dans un secteur spécifique de l'activité économique. Elle se mesure entre unités géographiques par catégorie de produits. Dans ce sens, une activité spécifique est considérée « concentrée » si une grande partie de la production est réalisée dans un nombre réduit d'unités spatiales (Aiginger et al., 1999). Certains travaux se sont largement intéressés à la question des déterminants de la localisation des productions agricoles. Ils aboutissent globalement au fait que celle-ci est largement conditionnée par la question de l'accès de la production aux marchés de consommation et aux avantages comparatifs. Sélectionner des zones de concentration revient à :

- a) Produire une carte sur les principales zones présentant des conditions biophysiques et socio-économiques plus ou moins homogènes ;
- b) Identifier et décrire les critères appropriés pour l'évaluation du potentiel socio-économique du corridor.

Les zones de concentration devraient donc être choisies en fonction des zones définies dans le document du projet AVANSE: corridor nord et des résultats attendus, en bref, des zones ayant une aptitude à optimiser les chances d'atteindre ces résultats dans le délai requis.

## METHODOLOGIE DE TRAVAIL

En référence au plan de travail Avril – Septembre 2013, l'équipe d'AVANSE avec IR1 a fait l'inventaire des zones de plaine productives pour recueillir des données spatiales sur les points suivants: les actifs productifs, accès aux marchés, la présence des principaux prestataires de services et la motivation des agriculteurs et des organisations de producteurs.

En parallèle, l'équipe IR1 et le DCOP ont rencontré les responsables du MARNDR dans les DDA et BAC pour compiler des informations sur les zones prioritaires du ministère. Ces deux types d'enquêtes ont été utilisés pour compléter un processus de ciblage géographique en deux étapes.

Lors d'une première étape, AVANSE a identifié un certain nombre de zones cibles pour les cinq cultures cibles. Ces zones représentent un potentiel de production élevé pour les cultures cibles et servent de zones d'intérêt pour les activités. Les critères de sélection pour les zones cibles sont:

Le potentiel de production pour un ou plusieurs des cinq cultures mesuré principalement en termes de volume de production.

L'accessibilité aux marchés et aux intrants. Ce critère est principalement fonction de la facilité de transport compte tenu des routes locales existantes (avant les améliorations).

La possibilité de bénéficier d'investissements dans l'irrigation. Compte tenu de l'importance des cultures irriguées (ou les cultures qui peuvent être irriguées avec succès), l'enveloppe globale des zones cibles comprend un certain nombre de sites dans lesquels les investissements d'irrigation prévues par le projet ont un bon potentiel de succès.

La possibilité de réaliser des synergies avec d'autres projets sur des sites dans lesquels la contribution financière et technique des bailleurs de fonds d'autres projets peut être ajoutée aux ressources d'AVANSE. Le potentiel pour ce type de synergie sera évalué dans les réunions de coordination des donateurs initiaux décrits.

Après l'identification de ces zones cibles avec le MARNDR et de l'USAID, les enquêtes plus détaillées seront réalisées au niveau des établissements et des organisations de producteurs, des agro-entreprises locales afin d'identifier des partenaires locaux qui peuvent s'engager et peuvent réussir à mettre en œuvre des activités FFS.

L'équipe d'IR1 tiendra une série de groupes de discussion avec des leaders communautaires, des OP et des autorités locales dans des sites potentiels pour développer une cartographie plus détaillée des sites d'ancrage locaux possibles au sein de chaque zone cible sélectionnée. Ces réunions de groupes de discussion et des visites de sites permettront de sélectionner des sites de mise en œuvre avec les OP spécifiques et les agriculteurs. Les critères pour les micros sites d'implantation des cultures seront:

Le potentiel physique du site spécifique. Ce sera une combinaison de facteurs, notamment, la fertilité des sols et le profil hydrologique, l'accessibilité aux marchés / entrées, la vulnérabilité aux inondations, etc ...

La réceptivité et la capacité organisationnelle de la communauté. Ce sera évalué au moyen de groupes de discussion structurées pour évaluer les connaissances des agriculteurs locaux, la force des OP, leur motivation à contribuer avec de l'argent et du travail, et la réceptivité des dirigeants communautaires à l'idée d'adopter de nouveaux paquets techniques.

La méthodologie de sélection des zones de concentration comprend 5 étapes :

- Montage d'un référentiel technique pour la caractérisation des zones de concentration
- Délimitation des sous-bassins versants à partir de leur exutoire
- Mise en place du système d'information géographique
- Standardisation et pondération des critères
- Production de cartes d'aptitude à l'agriculture

## ETAPE 1 : MONTAGE D'UN REFERENTIEL TECHNIQUE POUR LA CARACTERISATION DES ZONES DE CONCENTRATION

En référence au document de projet, un référentiel technique a été établi en vue de caractériser les zones de concentration. Voir le tableau 1.

**TABLEAU 1 : REFERENTIEL TECHNIQUE POUR LA CARACTERISATION DES ZONES DE CONCENTRATION**

Variables	Sous variables	Critères	Paramètres clés dans le projet
<b>Milieu biophysique</b>	Milieus naturels et écosystèmes	Zones agro-écologiques/ Biodiversité	Cacao en zone de piedmont  Maïs en zone de plaine et de montagne  Riz en zone de plaines irriguées  Pois en zone de plaine  Banane en zone de plaine et zone de montagne
	Hydrologie	Eaux superficielles et souterraines, débit, bilan hydrologique annuel, fréquence et prévisions des crues, utilisation des eaux, qualité de l'eau.	Données pluviométriques et informations sur les eaux superficielles et souterraines dans les zones ciblées
<b>Milieu socio-économique</b>	Economie	Types d'activités économiques/ Filières porteuses	Denrées exportables, revenus agricoles, entreprises économiques
	Infrastructures de services	Infrastructures administratives, commerciales, de transport et communication, infrastructures agricoles, de services de base, énergétiques et autres	Infrastructures agricoles et agro-industrielles : systèmes d'irrigation et les routes ciblées par le projet / Marchés
<b>Classification du territoire, système de production et vulnérabilité</b>	Occupation des sols et gestion des Ressources Naturelles, Systèmes agro-écologiques et systèmes de production, Caractérisation des	Capacité potentielle des Sols, Occupation actuelle des sols, Conflits d'utilisation des sols	Possibilité de faire une mise en relation et de caractériser les territoires et les systèmes de production



	risques		
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## ÉTAPE 2: DELIMITATION DES SOUS-BASSINS VERSANTS A PARTIR DE LEUR EXUTOIRE

C'est un processus qui implique les différentes étapes de tracé du réseau et de délimitation de sous-bassins hydrographiques à partir d'un modèle numérique de terrain (MNT) en utilisant les outils spatiaux hydrologiques d'ArcGIS. Le modèle est une image lidar obtenu à partir du projet NATHAT. Sur la base de cette image, l'analyse spatiale avec les outils d'ArcGIS a été réalisée comme suit :

Le processus remplissage de trous dans les données :

Les trous dans les données d'altitude sont le plus souvent dus à des erreurs dans les données. La fonction « fill sinks » modifie la valeur d'élévation pour éliminer ce problème.

Le calcul du sens d'écoulement

Cette fonction calcule la direction d'écoulement pour une grille donnée. La valeur dans une cellule donnée de la direction de la grille d'écoulement indique la direction de la plus grande pente de cette cellule à l'une de ses cellules voisines

L'Accumulation de flux:

La fonction utilise la direction de la grille d'écoulement afin de calculer le nombre cumulé de cellules qui drainent à une cellule particulière dans le Modèle numérique de terrain (MNT).

Réseau hydrographique :

A partir de l'image générée par la fonction « flow accumulation » et grâce à la fonction « Raster calculator » nous avons sélectionné les cellules de l'image qui peuvent créer un flux. Un flux est formé à une zone de seuil. Cette zone est renseignée avec la valeur des pixels sur l'image. Plus la valeur du pixel d'une cellule de l'image est petite plus cette cellule peut créer un flux

Délimitation des sous-bassins versants:

Pour délimiter les sous-bassins versants de la zone du projet, des points d'écoulement ont été identifiées en étroite collaboration avec IR1, IR2, IR3 et via Google Earth et convertis pour être lus sur ArcGIS. La fonction « Watershed » combinée à la grille des points d'écoulement ont permis de délimiter 128 sous-bassins versants

Le Corridor Nord comprend 6 bassins versants: Haut du Cap, Limbé, Grande-Rivière du Nord, Trou du Nord, Marion et Jassa, un total de 128 sous-bassins ont été délimités par le projet AVANSE.

**TABLEAU 2 : NOMBRE DE SOUS-BASSINS DELIMITES PAR BASSIN VERSANT**

Bassins versants	Nombre de sous bassins versants
Haut du Cap	14
Limbé	18
Grande Rivière du nord	31
Trou du Nord	18
Marion	18
Jassa	29
<b>Total</b>	<b>128</b>

### ÉTAPE 3: MISE EN PLACE DU SYSTEME D'INFORMATION GEOGRAPHIQUE

Un atelier participatif a eu lieu avec les chefs d'IR 1 et 2 et les composantes transversales afin de trouver un consensus sur le nombre de facteurs à prioriser et la méthode de pondération.

Pour planifier la mise en place du SIG, une rencontre a été organisée avec les différentes instances concernées afin de répondre aux questions suivantes :

Quels sont les besoins de l'organisation pour la création de ce système ?

Quels sont les utilisateurs du système ?

Est-ce un système interne ou externe ?

Quelles sont les données à inclure dans le système ?

Est-ce que le système va être conçu pour visualiser les données, faire des requêtes spatiales ou attributaires ?

Une application cartographique en ligne a été mise en place pour la sélection des zones de concentration et l'identification des sites d'implémentation.

Cette application est créée à l'aide d'ArcGIS online. Le spécialiste SIG du projet AVANSE utilise les services gratuits d'ESRI pour créer un compte et mettre en place un Système d'information géographique pour le projet AVANSE. Ce système a un accès public, un droit d'administrateur et un droit d'utilisateur.

<https://ftfn.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=e15e582f6dfd46dc8a896243bc21c726>

L'interface de programmation de l'application utilise JavaScript. JavaScript est un langage de programmation client, qui s'exécute à partir du navigateur. Cela veut dire que lorsque vous cliquez sur un

bouton vous n'avez pas à attendre la réponse du serveur pour obtenir l'information. JavaScript ne s'exécute pas sur tous les navigateurs.

L'architecture du système d'information mise en place est résumée dans la figure suivante :

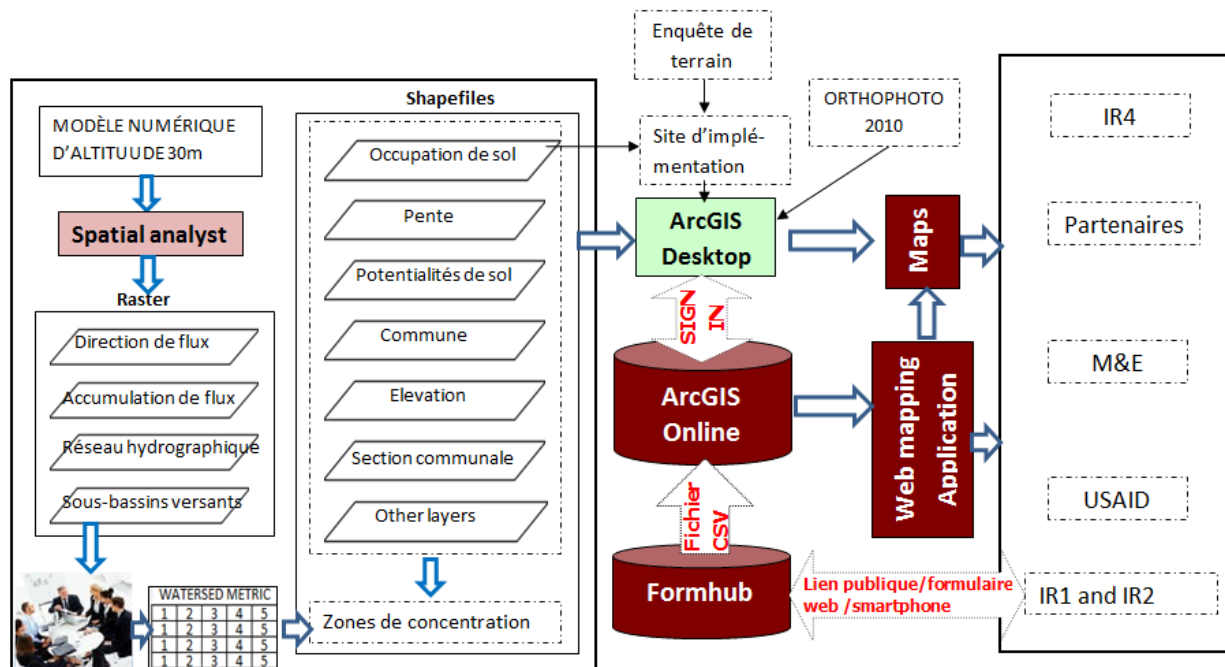


Figure 1 : L'architecture du Système d'Information Géographique :

## ETAPE 4 : STANDARDISATION ET PONDERATION DES CRITERES

La pondération a été effectuée sur une échelle de 1 à 10: du plus bas au plus élevé. Les participants ont convenu d'examiner les sous-bassins avec le plus grand nombre de points après le total des points pour tous les facteurs et les moyennes. Les cartes ont été produites à partir de facteurs tels que [l'accessibilité aux marchés](#), [l'estimation de la pente](#), [la capacité des sols](#), [les risques d'érosion](#), [l'altitude](#), [l'occupation des sols](#) et [l'accès aux périmètres irrigués](#). Un total de 896 cartes a été produit, un pour chaque facteur.

TABLEAU 3 : STANDARDISATION ET PONDERATION DES CRITERES

Paramètres	Type de critères	Pondération
Occupation actuelle du sol	« couche facteur » ; facteurs favorables ou très peu favorables définis selon l'évolution probable de l'occupation actuelle du sol (cultures	<u>Culture dense est importante</u>  Sup 80% de cultures denses = 10 pts, 60 à 80%=7 pts, 30à 60%=5 pts,

	de cacao, maïs, banane, pois, riz)	moins que 30%=2 pts
Hydrographie	« couche facteur » ; aptitude définie selon la nature de la ressource en eau et de la distance la séparant d'un site potentiel ; trois couches facteurs ont été distinguées dans cette catégorie : les plans d'eau permanents, temporaires et les cours d'eau temporaires (systèmes d'irrigation etc.)	<u>Périmètre irrigué et rivière existant</u>  Réduction de 5 points pour chaque ayant 10% d'augmentation de la densité hydrographique par rapport à la moyenne de l'aire d'étude  Ayant un périmètre irrigué= 10pts, proche d'un = 5pts
Fertilité du sol	« couche facteur » ; aptitude définie selon la nature morpho pédologique du sol	<u>Le sol est fertile</u>  2 pts a été donnée pour chaque gradient de fertilité
Marchés	« couches facteurs » ; aptitude définie selon la distance séparant le site potentiel au marché ; deux couches facteurs ont été distinguées dans cette catégorie : les marchés principaux de vente en produits et ceux secondaires	<u>Marché proche de route et périmètre irrigué</u>  2 points suivants des gradients de proximité de 1 km des routes et périmètres irrigués
Routes	« couche facteur » ; aptitude définie selon l'accès et la praticabilité des routes pour le transport des produits vers les marchés d'écoulement (distance-coût)'	<u>Le croisement des routes est important</u>  1 point a été ajouté pour chaque croisement de tronçon de route
Relief	« couche facteur » ; aptitude définie selon la pente	<u>La pente est faible</u>  Sup à 30%=2 pts 30 à 10%=7 pts, 10 à 2%=5 pts moins de 2%=10 pts
Gradients altitudinaux	« couche facteur » ; aptitude définie selon l'altitude	<u>L'élévation est faible</u>  Supérieur à 600 m=5 pts, 100 à 600=7pts  Inférieur à 100 m=10 pts

## ETAPE 5 : PRODUCTION DE CARTES D'APTITUDE (CARTE EN ANNEXE)

Ces cartes d'aptitude nous a permis de donner un poids X à chaque facteur pour chaque sous-bassin versant de faire la somme et la moyenne des points. La moyenne des points obtenus pour chaque sous-bassin et chaque facteur nous a permis de produire une nomenclature des zones de concentration:

**TABEAU 4 : CLASSES ET NOMENCLATURE DES ZONES DE CONCENTRATION (CARTE EN ANNEXE)**

Classes	Aptitude	Observations
➤ 8.5	Très favorable	Tous facteurs confondus sont très favorables pour la productivité
7.5 à 8.5	Favorable	Tous facteurs confondus sont favorables pour la productivité
6.5 à 7.5	Moyennement favorable	Tous facteurs confondus demandent des interventions pour la productivité
5.5 à 6.5	Peu favorable	Tous facteurs confondus sont peu favorables pour la productivité exigent des interventions majeures
4.5 à 5.5	Très peu favorable	Tous facteurs confondus sont peu favorables pour la productivité, non recommandés pour l'agriculture intensive

### Entrevues avec les équipes

Les entrevues avec les équipes IR1, IR2 et la composante des infrastructures ont complété les informations sur les priorités identifiées dans la proposition.

### Les facteurs de discrimination

En outre, des facteurs d'élévation, la présence de cinq cultures cibles, les zones irriguées ont été considérés pour discriminer les sous-bassins versants.

La carte produite pour la zone d'étude du Corridor Nord est une carte d'aptitude identifiant les zones favorables à l'agriculture durable. Cependant, les sites de mise en œuvre seront sélectionnés sur la base de la logique : amont, aval avec une considération spéciale pour les zones critiques ou stratégiques du point de vue de la sécurité environnementale. Notamment les sous bassins suivants ont été sélectionnés comme zones critiques ou stratégiques :

**TABLEAU 5 : SOUS BASSINS IDENTIFIES COMME ZONES CRITIQUES ET/OU STRATEGIQUES (CARTES EN ANNEXE)**

Noms	Bassin Versants
Lorman	Bassin Limbé
Morne Panache	Bassin Limbé
Chaino	Bassin Limbé
Mouscadi	Bassin Limbé
Morne Ouanche	Grande Rivière du Nord
Jolitrou	Grande Rivière du Nord
Bas des Perches	Bassin Marion
Nan Trimestre	Bassin Limbé
Maquillon	Bassin Marion
Gringin	Grande Rivière du Nord
Malaya	Bassin Jassa

## CONCLUSION

Les informations obtenues à partir des cartes d'aptitude à l'agriculture seront complétées par les données des études de filières pour déterminer les sites d'implémentation. Les cartes 1, 2, 3 et 4 nous indiquent les communes, sections communales et sous-bassins où seront concentrés les interventions dans les 5 cultures cibles et les périmètres irrigués. Les zones critiques ou stratégiques indiquées dans la carte 3 sont des sous bassins versants choisis en fonction de leur niveau de dégradation ou de leur importance pour les investissements agricoles déjà faits ou prévus dans les projet AVANSE, et pour la vie des populations se trouvant en aval. Cependant malgré leur aptitude favorable à l'agriculture, certains sous bassins ne seront pas retenus comme sites d'implémentation soit à cause de leur éloignement, de la forte présence d'autres intervenants avec des approches différentes ou similaires ou des exigences budgétaires trop ambitieuses. De même des sous bassins ne se trouvant pas dans le corridor mais stratégiques soit par rapport à leur importance du point de vue économique ou par la présence d'une ou plusieurs cultures cibles, par exemple :

Le cas du sous bassin Bassingal offrant une grande aptitude pour l'agriculture mais se situant dans le bassin versant de la Grande Rivière du nord ; la majorité des sous bassins de de la Grande Rivière du nord où intervient le projet PMDN financé par la BID ; toutefois le projet AVANSE interviendra dans les agrosystèmes cacaoyers notamment à Jolitrou ;

D'une partie de la commune de Capotille dans le département du nord-est où intervient la FAO ;

Port Margot, Plaisance et Pilate qui ne se trouvent pas dans l'aire d'étude mais où le projet AVANSE interviendra dans les agrosystèmes cacaoyers ; et

La commune de Marmelade très éloignée des zones de concentration mais stratégique parce que représentant un château d'eau dans le bassin versant de Limbé.

## SUPERFICIES D'INTERVENTION DU PROJET AVANSE

Certaines données clés comme les superficies sur lesquelles doivent s'engager les IR sont à retenir et à préciser pour les sites d'implémentation. Le tableau 7 donne une évaluation des superficies et du pourcentage que représentent les classes sur l'ensemble du corridor. Trois classes intéressent le projet : cultures agricoles denses, moyennement denses et systèmes agroforestiers.

Ces interventions seront supportées par la réhabilitation des routes agricoles (134.4 kilomètres) pour le transport et la commercialisation des denrées.

Pour les agrosystèmes cacaoyers, les communes ciblées pour le département du nord et du nord-est sont inscrites dans le tableau suivant : notons que les informations pour les communes de Port Margot et de Pilate ne sont pas disponibles dans la base de données GIS parce que non compris dans l'aire d'étude.

**TABLEAU 6 : SUPERFICIES POUR CHAQUE CLASSE**

Land cover description	Percentage of study area	Area in km2	Area in ha
Affleurement de roches et sols nus	0.1%	2.8	282.9
Cultures agricoles denses	25.7%	614.0	61401.1
Cultures agricoles moyennement denses	25.0%	598.7	59874.2
Forêts	0.3%	6.5	649.7
Lits fluviaux et alluvions récentes	0.4%	8.8	884.3
Mangroves	2.5%	59.5	5948.7
Pâturage avec présence d'autres	2.8%	66.9	6686.3
Pâturages dominants	1.4%	34.1	3409.3
Plages et dunes	0.5%	12.3	1227.8
Plan d'eau	0.2%	5.3	530.6
Ports et aéroports	0.0%	1.0	102.1
Savanes	4.8%	113.8	11378.8
Savanes avec présence d'autres	7.7%	184.7	18466.3
Systèmes agroforestiers denses	27.7%	663.0	66303.6
Urbain continu	0.7%	15.7	1572.1
Urbain discontinu	0.0%	0.2	22.2
Zones α saline	0.0%	0.4	44.9
Zones humides	0.2%	4.8	478.3

**TABLEAU 7 : SUPERFICIES D'INTERVENTION PREVUES PAR LE PROJET AVANSE**

Composante	Superficies en hectares	Actions
<b>IR1</b>	2000	Riz
	5500	Maïs
	4500	Pois et Haricots
	8000	Cacao
	9000	Banane
<b>Composante</b>	<b>Superficies</b>	<b>Actions</b>
<b>IR2</b>	5000 hectares	Aménagement de zones critiques
	23000 hectares	Réhabilitation de Systèmes agroforestiers



**TABLEAU 9 : ZONES PROPOSEES COMME DE POTENTIELS SITES D'IMPLEMENTATION POUR IR1**

Bassin versant	Zone de concentration	Commune	Section communale/ localité	Superficies en hectares	Cultures ciblées
Haut du Cap	Robillard Brisson	Acul du nord Plaine du nord	Mornet Déricourt Grand Boucan Basse Plaine Bassin Diamant	1,870	Haricot/ Maïs
Grande Rivière du Nord	Fourier	Limonade	Bois de Lance Roucou Basse Plaine	1,170	Haricot / Maïs
Trou du nord	Devarenne Torestre Dubout Fleury En Bas saline Savane au camp	Trou du nord Trou du nord Caracol Terrier Rouge Trou du nord	Garcin Roche Plate Champin Claudine Grand -Bassin Fonds Blanc Roche Plate Roucou	5,667	Haricot /Maïs
<b>Total</b>				<b>8,707</b>	

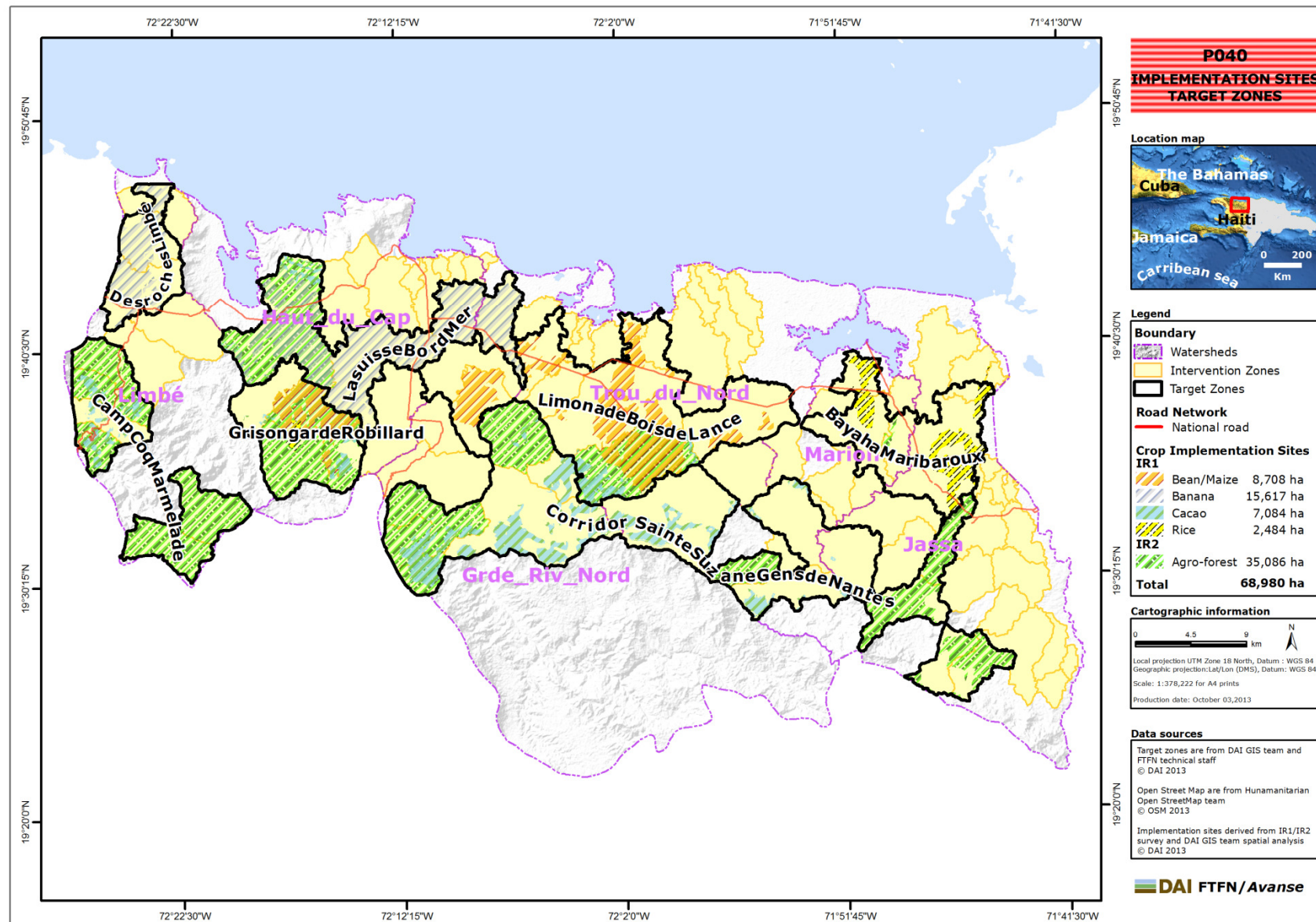
Bassin versant	Zone de concentration	Commune	Section communale/ localité	Superficie s en hectares	Culture s ciblées
Haut du Cap	Larry Pont Parois Robillard Dubré	Plaine du nord Acul du nord Milot Quartier Morin	Bas l'acul Basse Plaine Grison garde Génipailier Perches du bonnet Basse plaine Bassin Diamant Morne Pelée	11,003	Banane
Grande Rivière du nord	Tabary	Limonade	Basse Plaine	1,665	Banane
Limbé	Bellevue Blain La Hatte	Bas-Limbé Limbé	Petit Howard Garde Champêtre Ravine Desroches	2,949	Banane
<b>Total</b>				<b>15,617</b>	

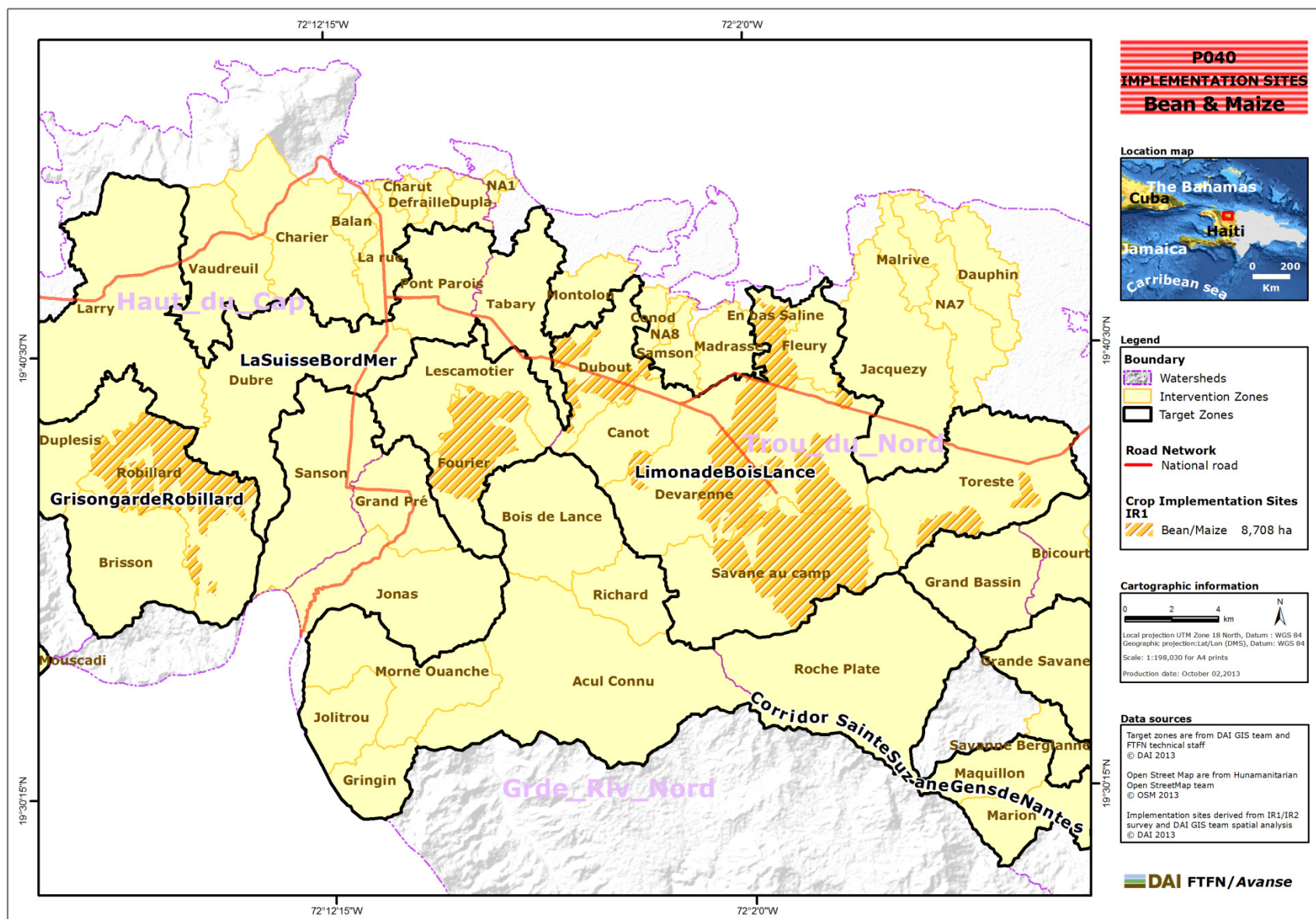
Bassin versant	Zone de concentration	Commune	Section communale/ localité	Superficies en hectares	Cultures
NA	NA	Borgne	NA	NA	Cacao
NA	NA	Port Margot	NA	NA	Cacao
Limbé	Chaino Morne Panache Camp Coq	Limbé Plaisance Pilate	Camp Coq Ilot à cornes	778	Cacao Cacao Cacao
Haut du Cap	Larry Duplessis, Dubré Robillard	Acul du Nord Plaine du Nord	Morne Rouge Bas de L'Acul Grande Ravine Mornet Grand Boucan Perches du Bornet	648	Cacao
Grande rivière du nord	Morne Ouanche Jolitrou Gringin Acul connu Richard Bois de Lance	Grande Rivière du nord Limonade	Bois de Lance Foulon Solon Cormiers Jolitrou Gambade Caracol Cotelette Bois Blanc Sarazin	3,306	Cacao
Trou du nord	Savane au	Trou du Nord	Roche Plate	1749	Cacao

	camp Roche Plate	Perches	Sarazin Roucou		
Jassa	Acul Samedi	Fort Liberté Acul samedi	L'Oiseau	102	Cacao
Marion	Grande Savane Marion	Fort Liberté Perches Terrier-Rouge	Grand Bassin Haut Madeleine Haut des Perches L'Oiseau	500	Cacao
<b>Total</b>				<b>7,084</b>	

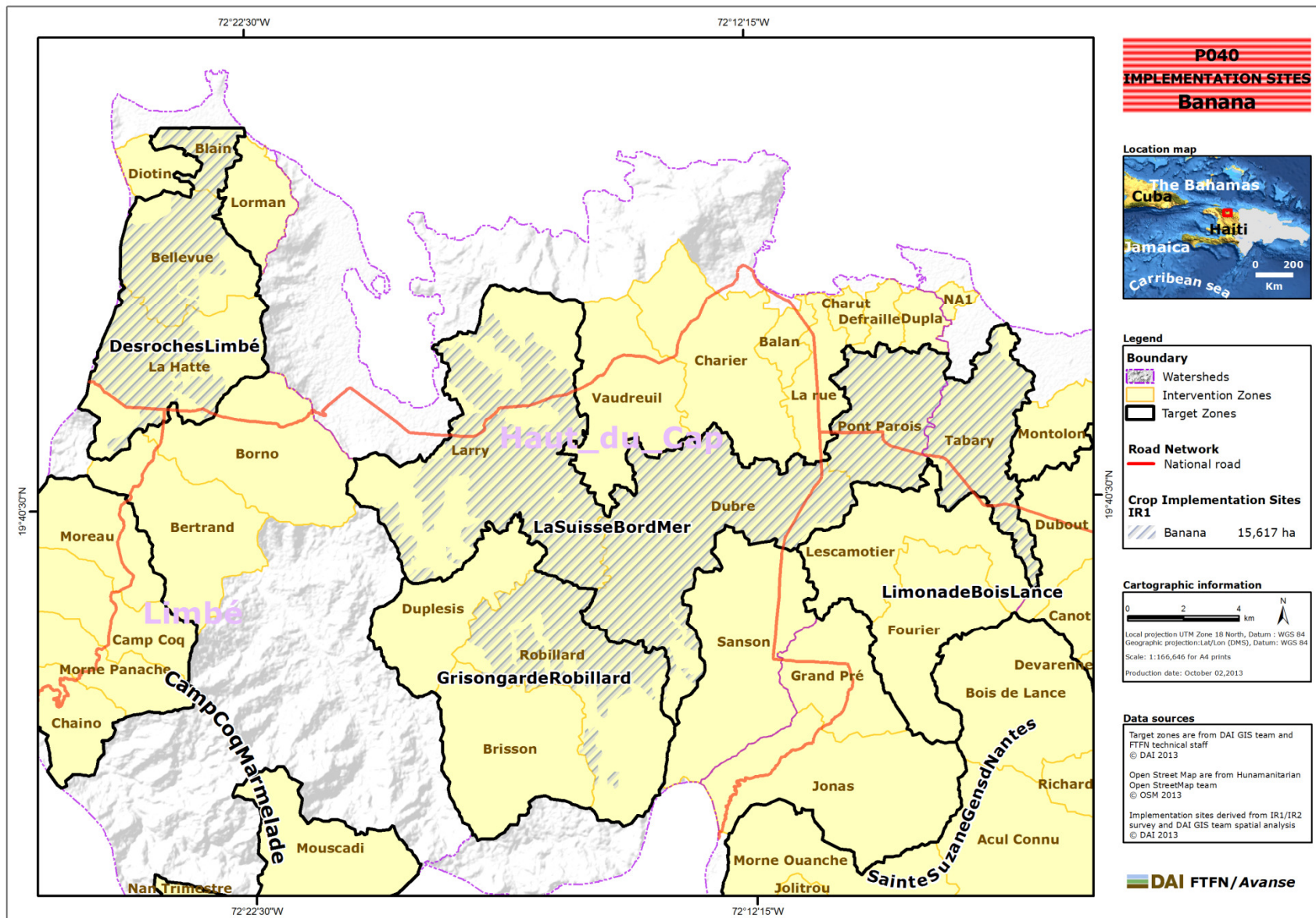
**TABLEAU 9 : ZONES PROPOSEES COMME DE POTENTIELS SITES D'IMPLEMENTATION POUR IR2**

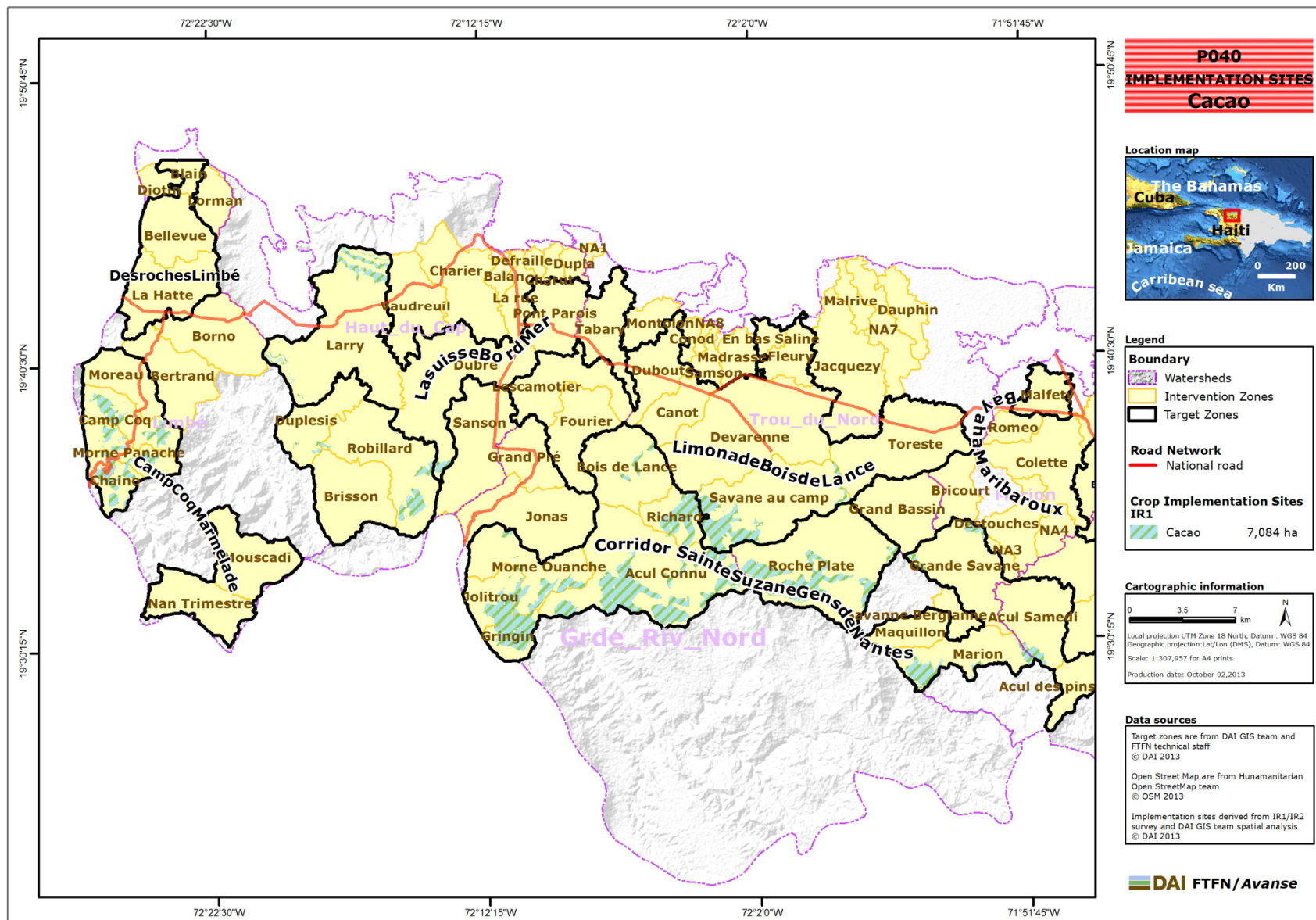
Bassin versant	Zone de concentration	Superficies en hectares	Section communale ou localité	Actions
Marion	Maquillon Dumas	1,144	Mayombé Dumas	Systèmes agroforestiers/ Jaden kreyòl
Jassa	Acul des Pins Francisque Gens de Nantes Malaya	4,356	Acul des Pins Gens de Nantes	Systèmes agroforestiers/ Jaden kreyòl / Serres
Grande Rivière du Nord	Jolitrou Morne Ouanche	6,772	Jolitrou	Systèmes agroforestiers/ Jaden kreyòl
Haut du Cap	Larry Brisson Robillard	10,949	Acul du Nord Soufrière	Systèmes agroforestiers/ Jaden kreyòl
Trou du nord	Savane au Camp Bois de Lance	4,055	Sainte Suzanne Sarazin Foulon	Systèmes agroforestiers/ Jaden kreyòl
Limbé	Chaino Camp Coq Mouscadi	7,810	Ravine Desroches Camq Coq Marmelade	Systèmes agroforestiers/ Jaden kreyòl / Serres
<b>Total</b>		<b>35,086</b>		







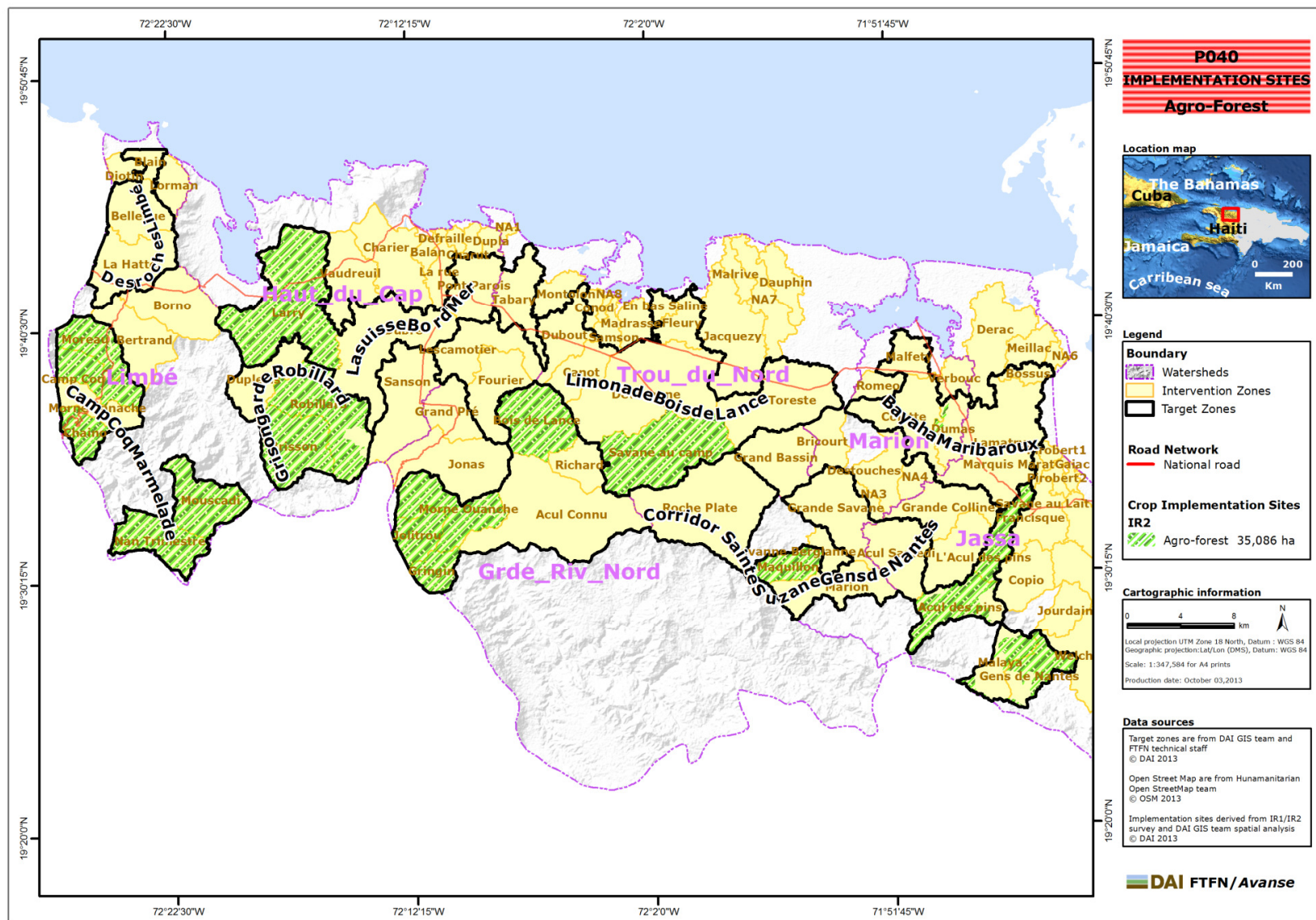








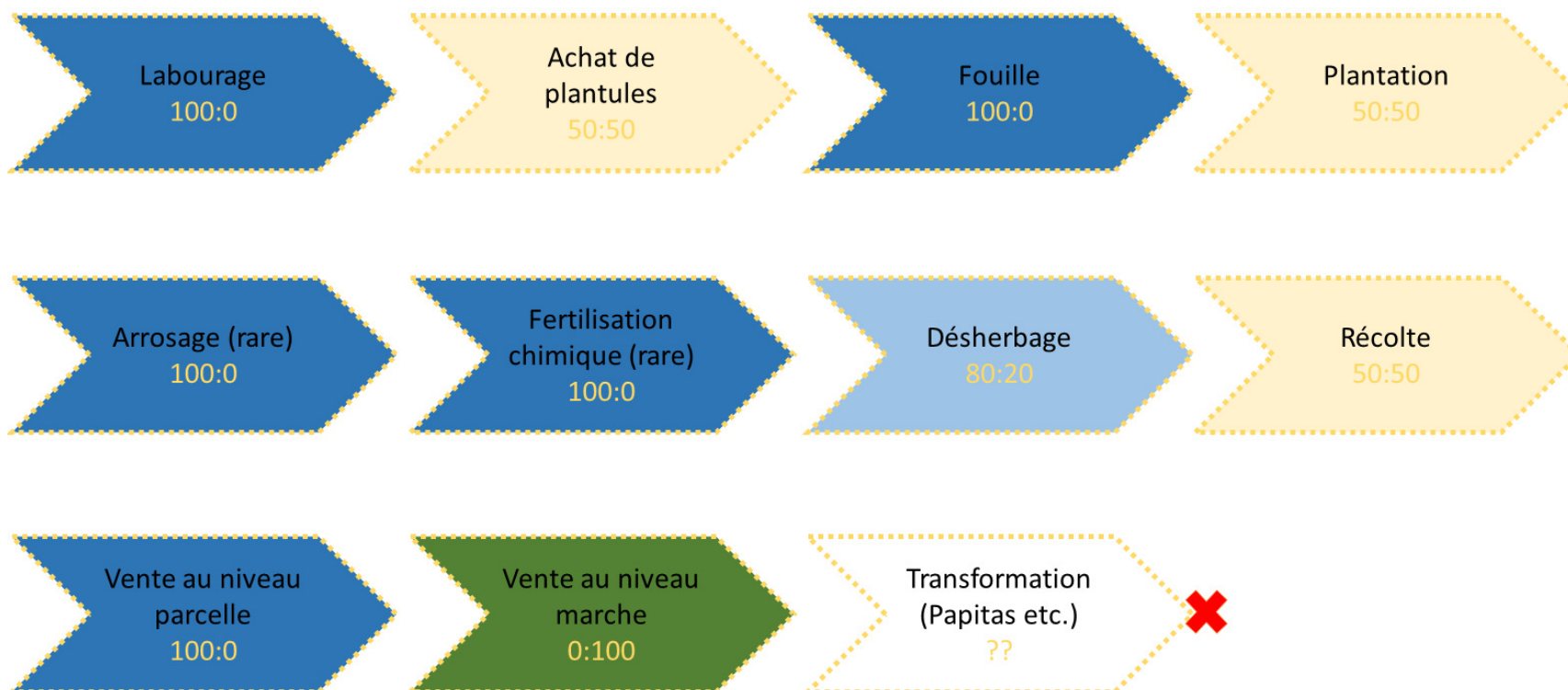
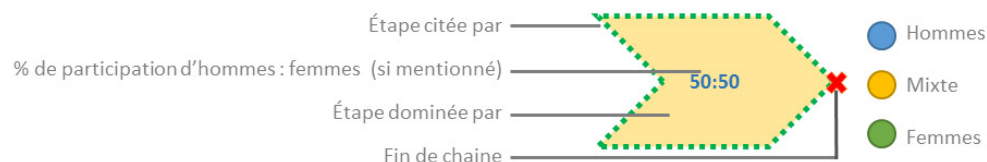




# ANNEX B: CROP GENDER SLIDES

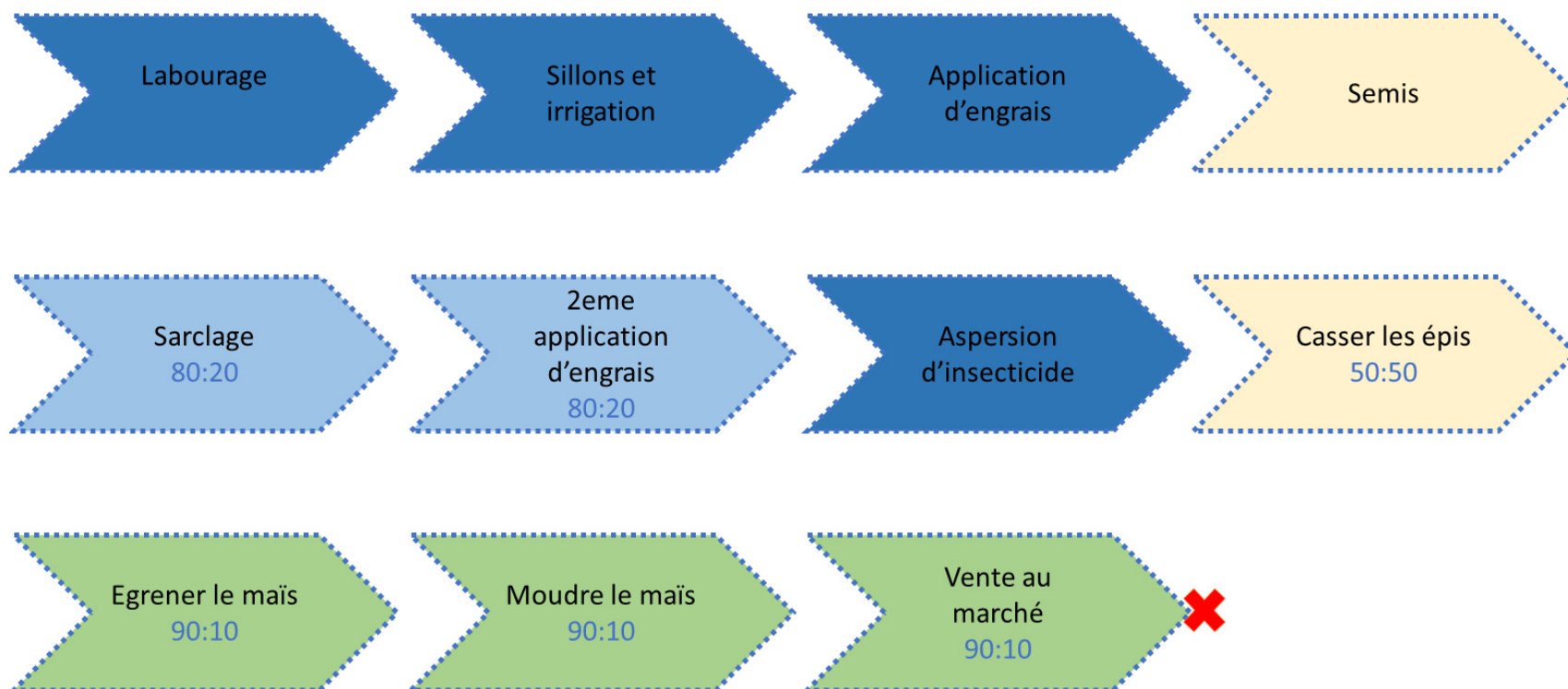
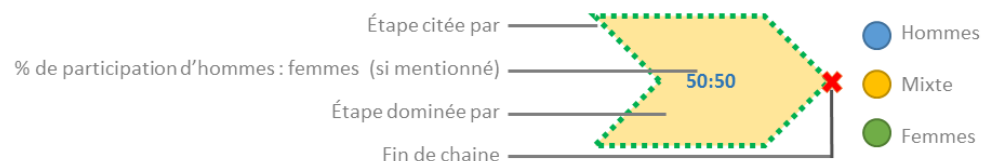
## Chaine de valeur: Banane

Données collectionnées le 15 juillet 2013 au Bord-de-Mer de Limonade.



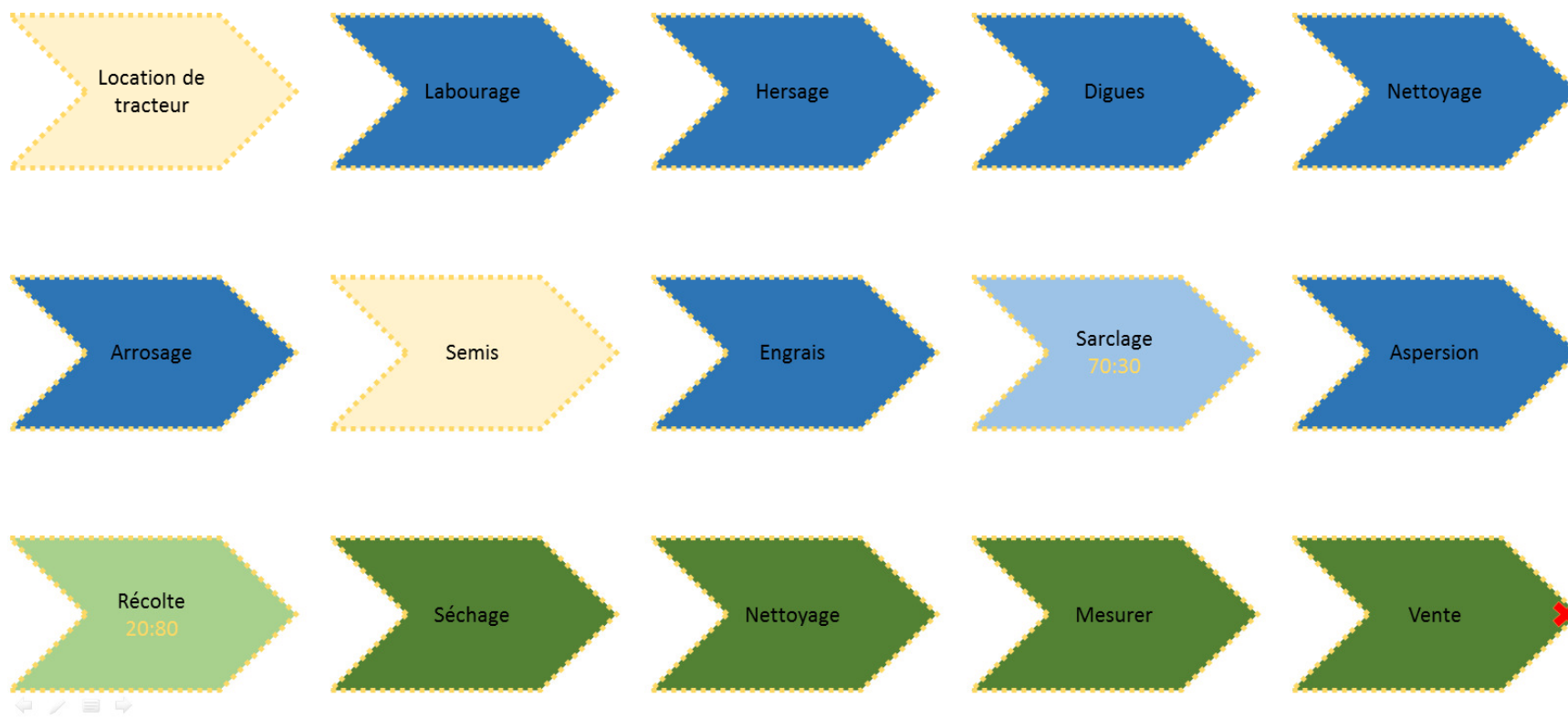
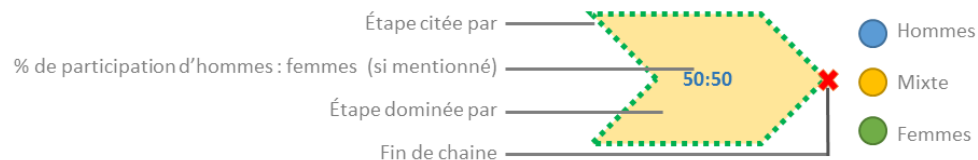
# Chaine de valeur: Maïs

Données collectionnées le 17 juillet 2013 à Ferrier.



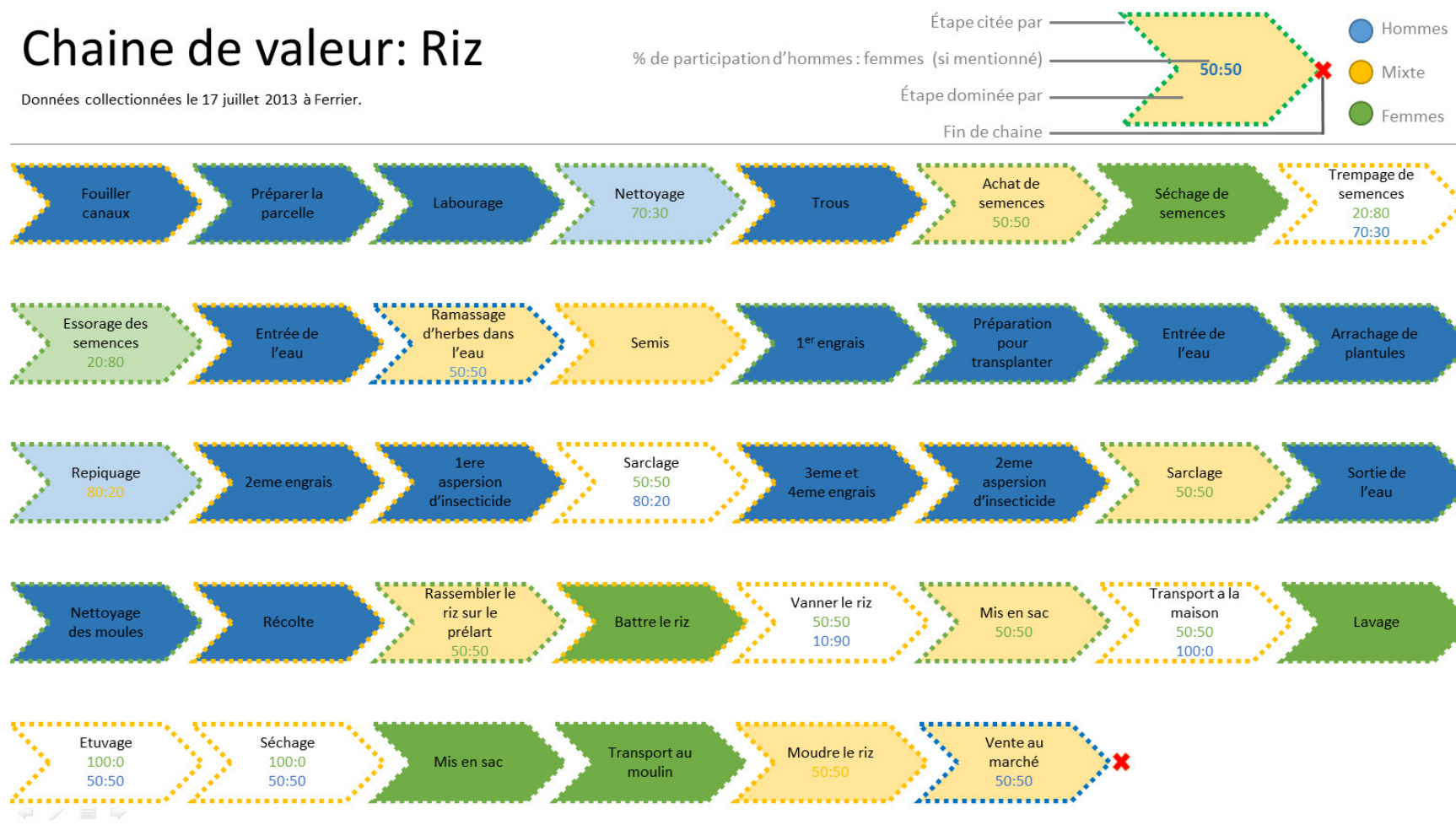
# Chaine de valeur: Haricots

Données collectionnées le 17 juillet 2013 à Ferrier.



# Chaine de valeur: Riz

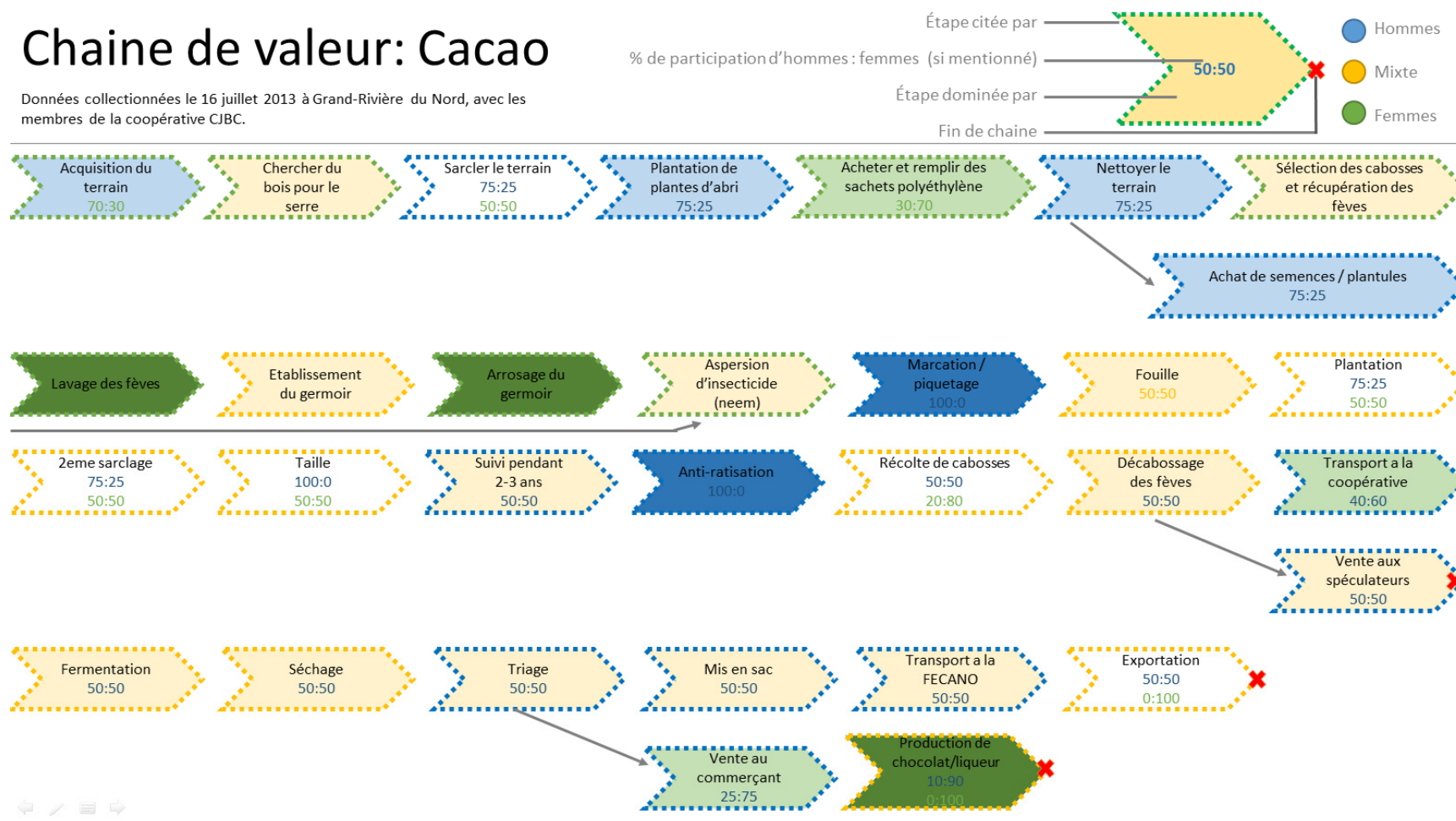
Données collectionnées le 17 juillet 2013 à Ferrier.





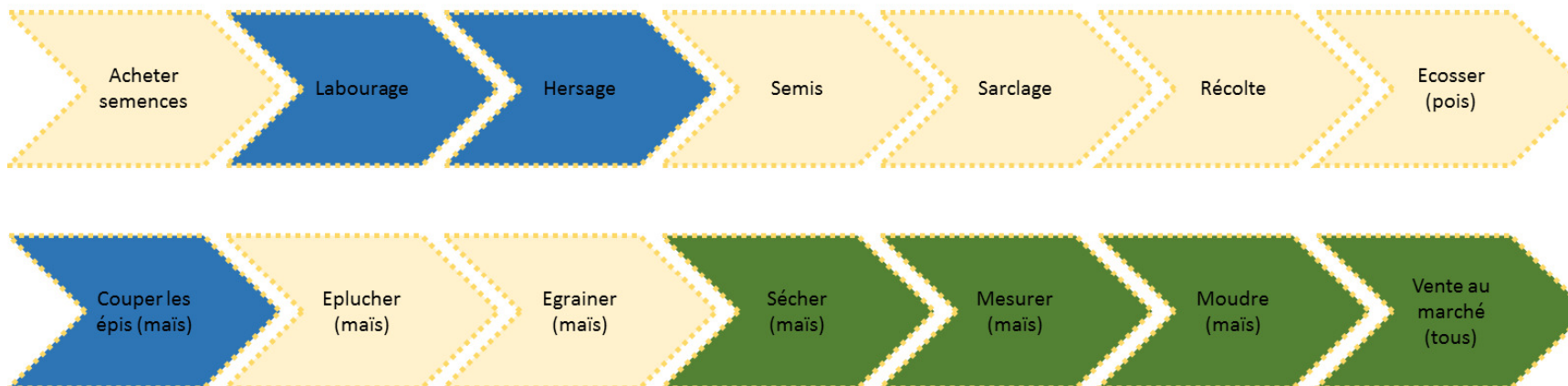
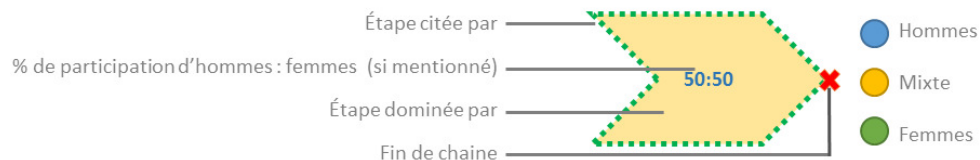
# Chaine de valeur: Cacao

Données collectionnées le 16 juillet 2013 à Grand-Rivière du Nord, avec les membres de la coopérative CJBC.

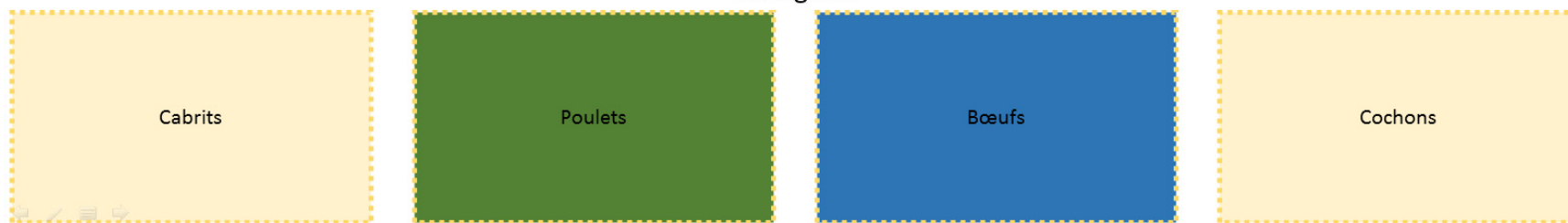


# Jardin Créole

La production comprend les pois, le manioc, le maïs, l'igname, l'arachide, et la banane.  
Données collectionnées le 19 juillet 2013 a Grison Garde(Acul du Nord).

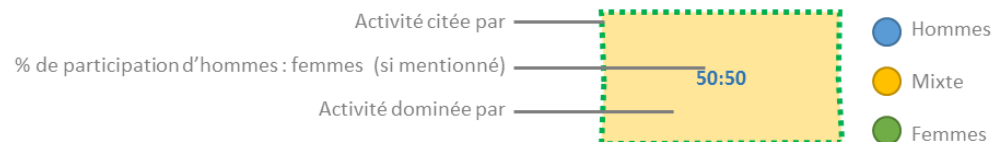


## Elevage de

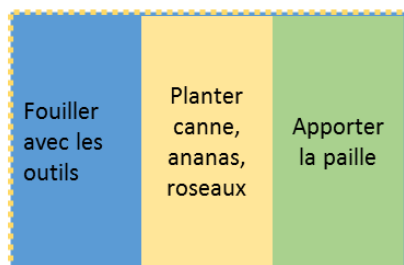


# Activités de conservation

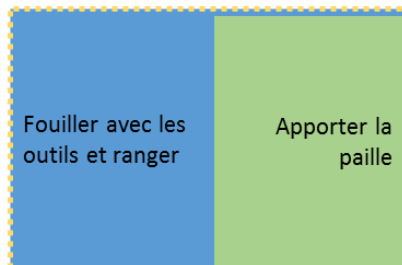
Données collectionnées le 19 juillet 2013 a Grison Garde(Acul du Nord).



## Rampe vivante



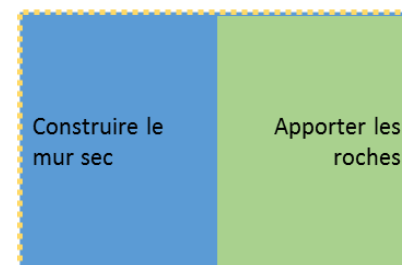
## Rampe de paille



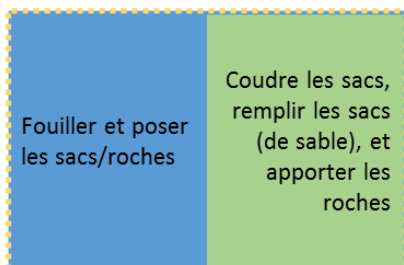
## Canal contour



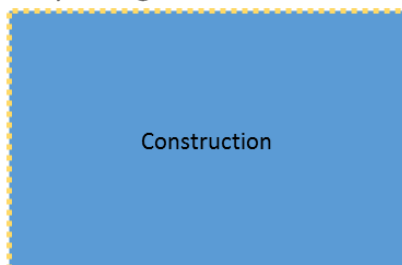
## Cordon de pierres



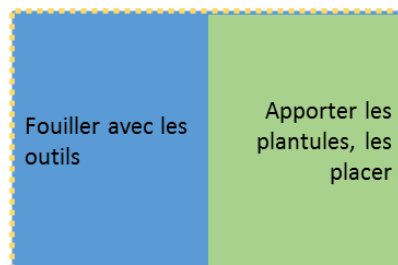
## Seuil de roches / sable



## Clayonnage



## Plante de bois, vétiver, bambou, herbe d'éléphant...





# ANNEX C: ENVIRONMENTAL COMPLIANCE MITIGATION MEASURES

## MITIGATION MEASURES FOR GRISON GARDE ROAD REHABILITATION AND IRRIGATION WORKS

#	Sub-activity or component	Description of Impact	Mitigation Measures
1	Maintenance activities of the section of the road between Grison Garde and Robillard	Soil displaced from the road bed may obstruct pedestrian and two-wheel passage	Remove displaced soil and deposit elsewhere to avoid cluttering the passage.
2		Risk of felling shrubs and trees in the course road maintenance	Replace any trees felled during maintenance operations.
3		Reduction or loss of vegetative cover	Plant vetiver slips in vulnerable areas of the road.
4		Preference of men over women when building work teams.	Provide managers with guidelines specifying that AVANSE requires a composition of at least 30% women on cash for work teams.
5		Prioritization of key positions to favor men more than women	Select qualified women for positions of responsibility as team leaders.
6		Risk of conflict arising from hiring many people from outside of the targeted area	Design hiring procedures that give priority to people who live in the area.
7		Risk of conflict between members of the local authorities and farmers groups	Consult regularly with leaders of associations community leaders and local authorities.
8		Risk of conflict between groups in a locality	Deliberately hire people from diverse groups.
9	Maintenance of irrigation canal	Risk of congestion due to soil collected and removed from the channel	Remove displaced soil and deposit elsewhere to avoid congestion and to facilitate the passage of farmers.

10		Flood risk due to water back-ups from canal clearing	Remove cuttings and excavated materials near the channel not to cause back-ups of surface water into crop rows
11		Risk of conflict between members of local authorities and WUAs in the area	Encourage meetings between WUAs and local authorities; Give priority to users of the irrigation system; and Involve the MARNDR bodies responsible for monitoring the irrigated areas in question.
11		Preference of men over women when building work teams	Provide managers with guidelines specifying that AVANSE requires a composition of at least 30% women on work teams.
12		Prioritization of key positions to men than women	Select qualified women for positions of responsibility as team leaders.
13		Risk of conflict arising from hiring many people from outside of the targeted area	Design hiring procedures that give priority to people who live in the area.
14		Risk of conflict between members of the local authorities and farmers groups	Consult regularly with leaders of associations community leaders and local authorities.
15		Risk of conflict between groups in a locality	Deliberately hire people from diverse groups.

## SOIL CONSERVATION PROJECT IN THE VILLAGE OF GRISON GARDE

### MITIGATION MEASURES OF SOIL CONSERVATION

#	Sub-activity or component	Description of Impact	Mitigation Measures
1	Excavation of gullies for living hedges	Soil loss caused by excavation	Avoid removing large stones from the slopes; Use plant cuttings such as vetiver grass to stabilize the banks of gullies.
		Loss of plant species at the time of cleaning and excavation	Plant new fruit and forest trees in and around catchments.
		Removal of stones from the slopes targeted for soil-conservation activities.	Properly train and supervise workers.
2	Hiring workers	Preference of men over women when building work teams	Provide managers with guidelines specifying that AVANSE requires a composition of at least 30% women on work teams.
		Prioritization of key positions to men than women	Select qualified women for positions of responsibility as team leaders.
		Risk of conflict arising from hiring many people who do not live or work on or around the slope being rehabilitated.	Design hiring procedures that give priority to people who use the targeted slope.

### EVALUATION OF THE EFFECTIVENESS OF MITIGATION MEASURES

We conducted motivational sessions with farmers, and regular visits to see the progress of activities, and how they apply these mitigation measures. We have established coordination between those responsible for components, field technicians and specialist environmental compliance in order to ensure the effectiveness of these measures.